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VOL. 1
NO. 6

ORIGINAL:
Tuberculosis: Gibbes 161
Epoch Making in Medicine: Ed. 164
CORRESPONDENCE:
Journal of a Naval Surgeon:..... 171
EDITORIAL:
Demise of President McKinley:.. 175
Cajuput Oil:..... 176
Two Novel Claims:..... 177
Fighting Nile Sudd:..... 177
EDITORIAL NOTES:
..... 178
ITEMS AND NEWS:
..... 181
BOOK REVIEWS:
..... 182
NEW INSTRUMENTS AND DEVICES:
..... 182
THERAPEUTIC BREVITIES:
..... 183
MEDICAL PROGRESS:
..... 189

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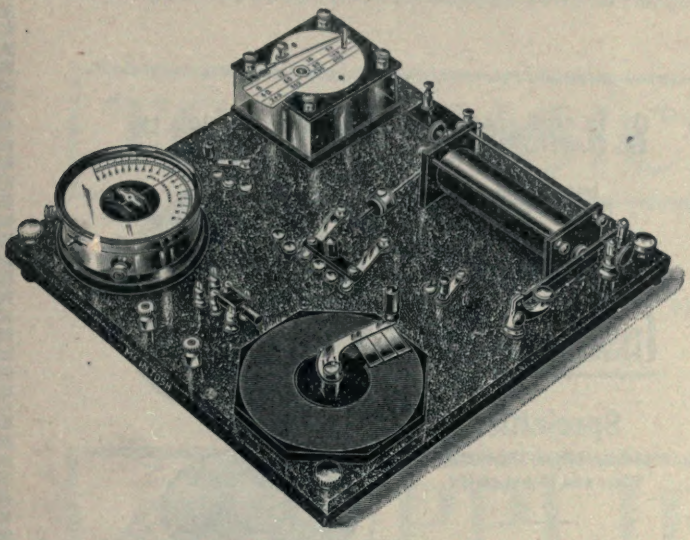

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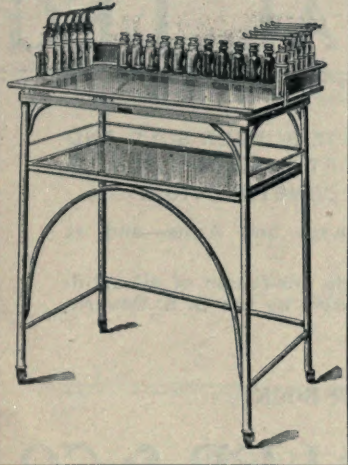

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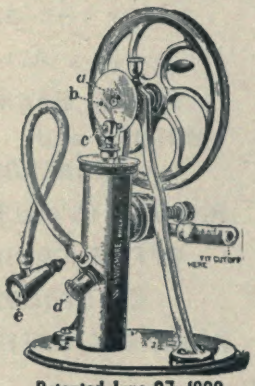

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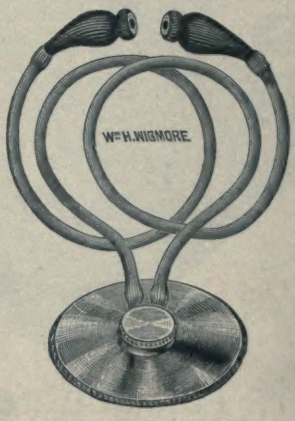

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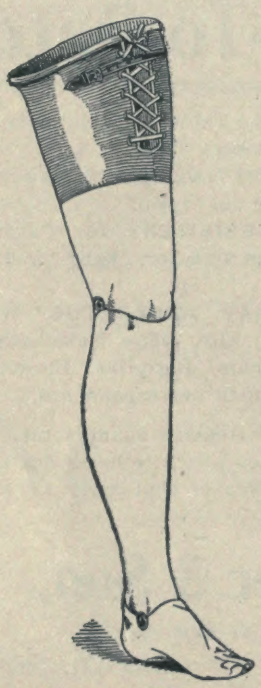

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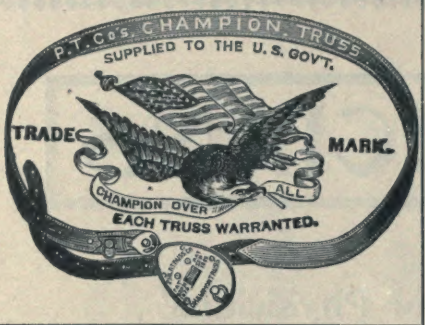

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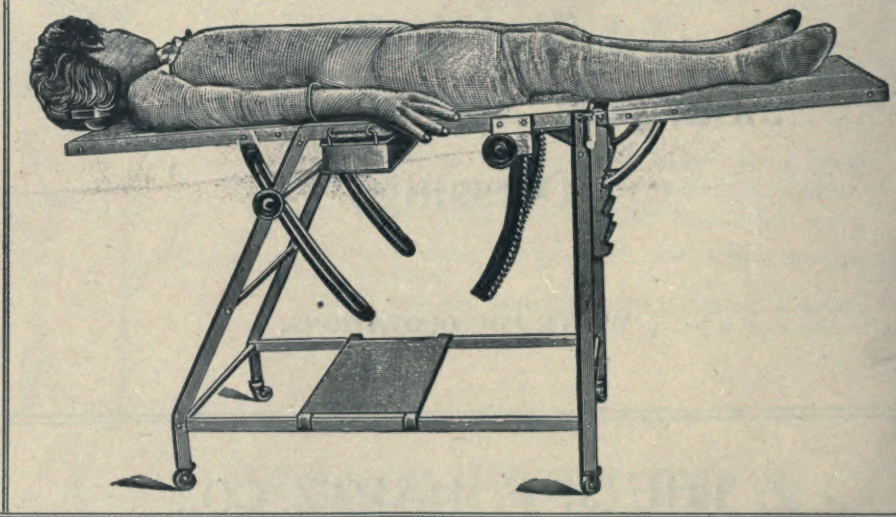

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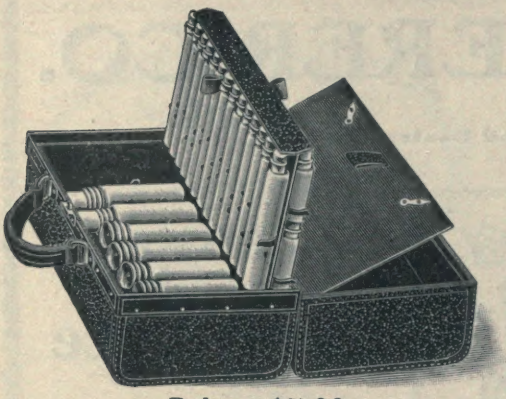

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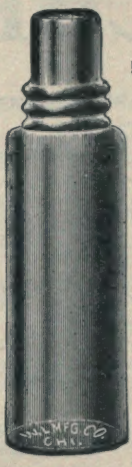

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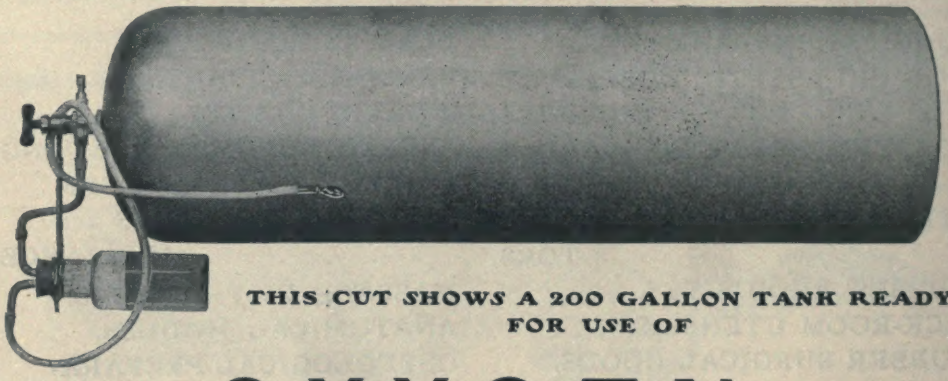

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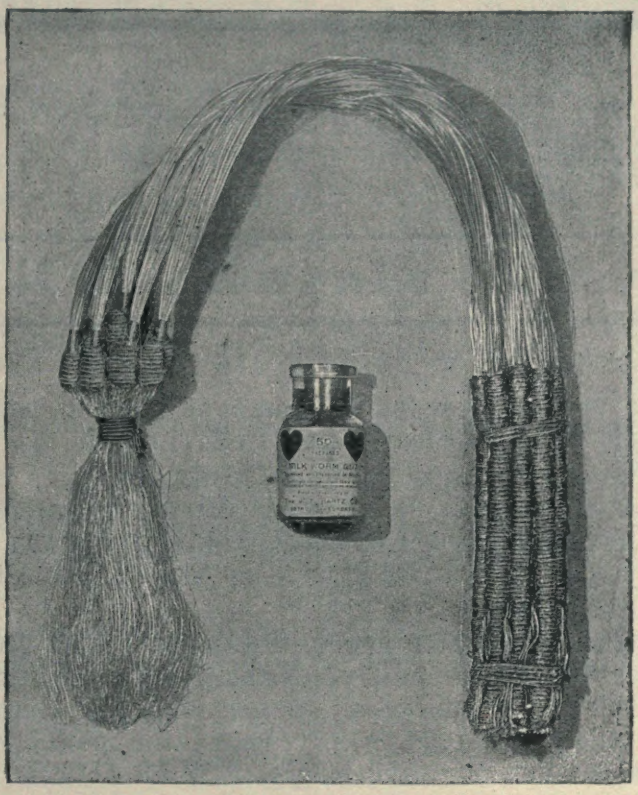

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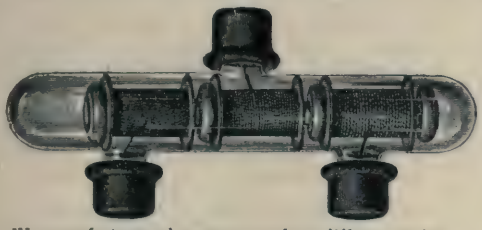

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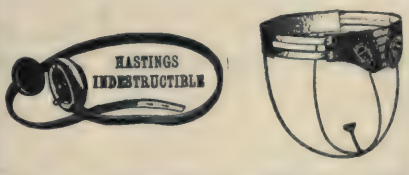

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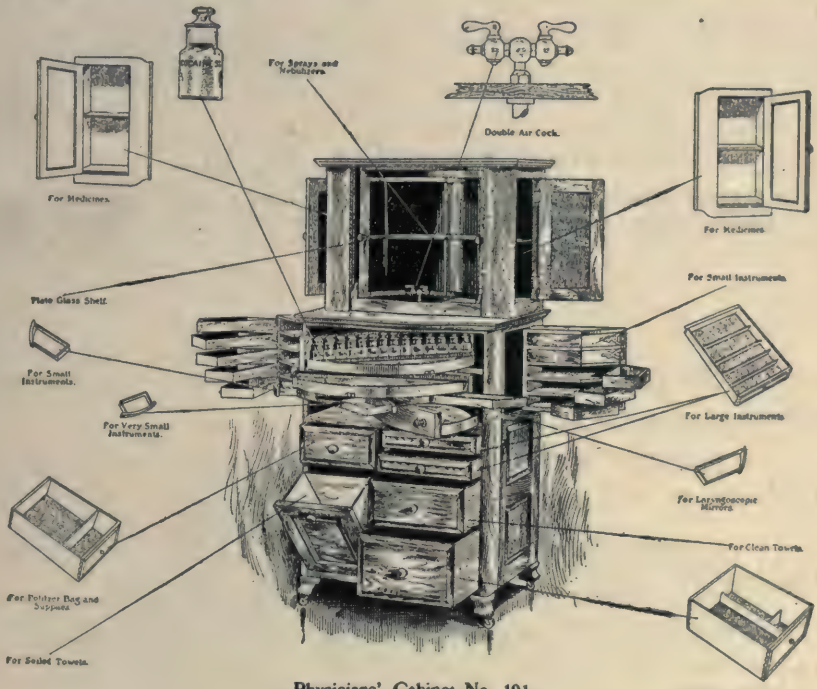

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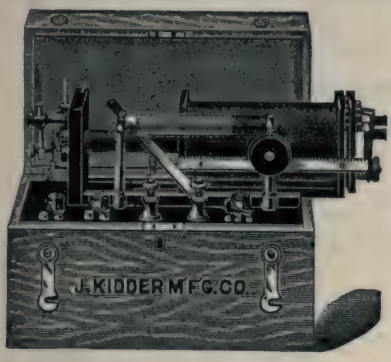

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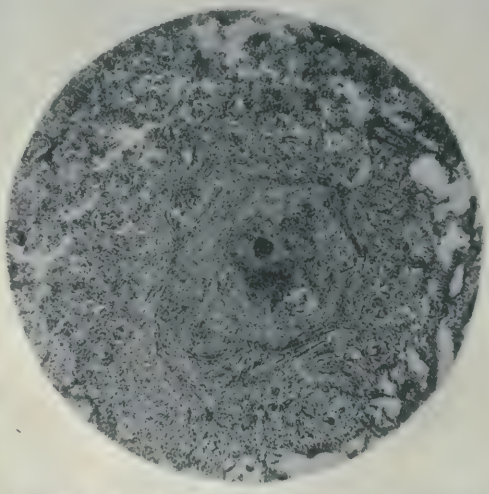

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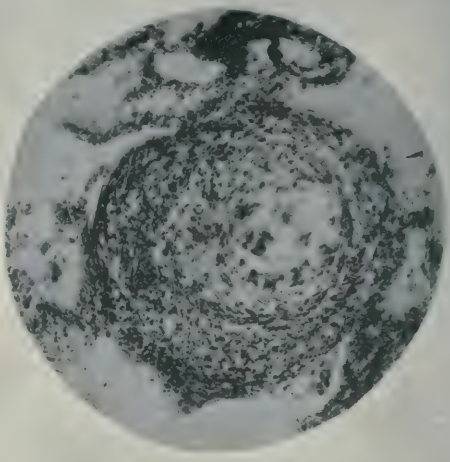
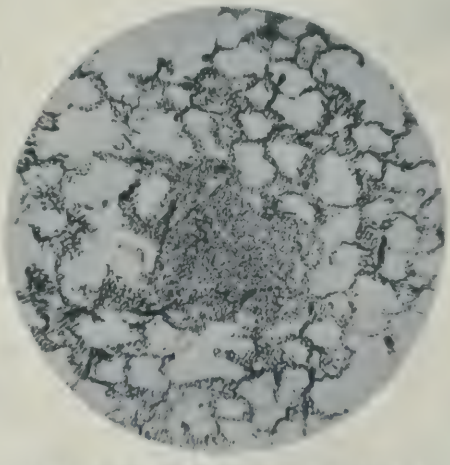
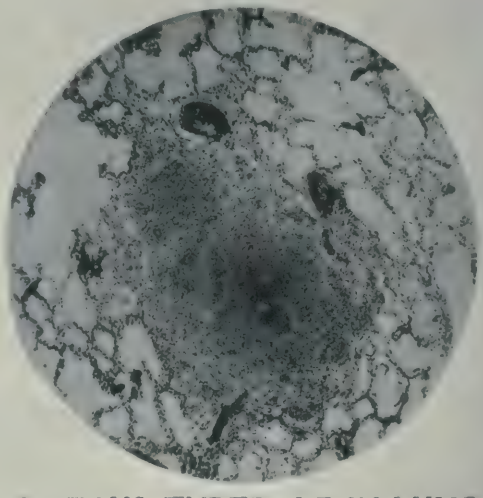


RETICULAR TUBERCLE-COMMENCING: FROM A CASE OF ACUTE MILIARY TUBERCULOSIS.



INFLAMMATORY TUBERCLE COMMENCING-LUNG OF CHILD. CASE DIAGNOSED AS ACUTE MILIARY TUBERCULOSIS LUNG INJECTED WITH BERLIN BLUE.



CASEOUS TUBERCLE IN LUNG OF CHILD IN CASE OF ACUTE MILIARY TUBERCULOSIS SO CALLED. CENTRE OF MASS CONTAINS A LARGE NUMBER OF TUBERCLE BACILLI.

(Photo-micrographs made on Cramer iso-chromatic plates.)

DETROIT
MEDICAL JOURNAL

Original Articles.

TUBERCULOSIS.

BY HENEAGE GIBBES, M. D., C. M., L. R. C. P.
(LONDON.)

Koch's statement concerning human and bovine tuberculosis, at the British Congress recently held in London, has caused a sensation throughout the world from which nothing but good can arise, inasmuch as numerous investigations will be made that will embrace all sides of the question; and the statement of Professor Virchow, in regard to the German Commission (of which he is a member) that "henceforth the anatomical tubercle shall be fully considered," is most important.

I should not be surprised if Koch has a still more startling statement to make public, for which that regarding human and bovine tuberculosis is a sort of pilot balloon. It must be remembered that he has never gone so far as some of his disciples, and that years ago he admitted having seen cases wherein no tubercle bacilli could be found, a truism that has been abundantly confirmed by others; and yet there are many who still deny this well-proven fact. It is to be hoped that clinicians will now come to the front and let us have the result of their years of experience, gathered from careful painstaking observation of cases seen throughout their whole course.

And here I wish to point out where I think the view that the tubercle bacillus is ever present, and a cause of all disease ending in destruction of the lung substances, has worked positive harm. We are familiar with the condition of the lungs when a consolidation is formed which, after a time, softens and breaks down, is thrown off, and a cavity left. This result, I contend, is brought about by two distinct diseases-processes, which should have entirely different treatment before this condition is arrived at.

The first is a purely inflammatory one, beginning as bronchitis, extending into the lungs as broncho-pneumonia, forming a consolidation varying in size according to the intensity of the inflammation and the number of bronchioles affected. Should the vitality of the patient be so low, or the intensity of the inflammatory process so great that the affected portion of the lung is unable to resist it, death of the part results and then, after a time, a cavity is formed.

Careful study of a large number of these cases has proved that the disease-process is a purely inflammatory one from first to last;

and in cases of capillary bronchitis where death took place before the inflammatory process had extended into the lungs, the morbid changes were identical. Bacteriological examination of these cases fails to reveal the tubercle bacillus in the secretions of the bronchi, or in the consolidation in the lungs, until these organs begin to break down, and then they are generally present in large numbers.

I am told by men who hold the general view that the tubercle bacilli are pathognomonic, that these are cases of tuberculosis. I now desire to know *when* they became tubercular? From the number of cases examined and the uniformity of the results obtained, I feel sure of the stage when the tubercle bacillus appeared on the scene. Was this the time when the broncho-pneumonia became tuberculosis, because this was when the disease-process had destroyed so much lung tissue that the patients would have died anyway?

I will venture to say that over fifty per cent. of cases with cavities in the lungs are produced by broncho-pneumonia. Is it not then of the utmost importance that the number of men who are trying to cure these pulmonary conditions should know which disease-process they are handling, since the same treatment can not apply equally to both?

The other form of lung disease resulting in the formation of a cavity is an entirely different disease-process. Take a typical case: Here we have a patient complaining of lassitude and fatigue easily induced; we notice a commencing stoop and rounding of the shoulders; there may be no cough at this early stage, but a careful examination of the chest reveals dullness at one apex, generally the left. As we watch the case from day to day, it it is found the dullness is constantly extending below the clavicle, and thus, gradually, all the symptoms develop with which we are so familiar. There is no expectoration in the early stages; there can not be as the bronchi are not affected and the consolidation has not yet broken down.

This condition differs *in toto* from that first described: There is no acute inflammatory process extending into the lungs, on the contrary the disease-process is going on in the lung itself; and this process consists of a new growth which, starting in one apex, gradually substitutes itself for the normal lung-tissues; as it grows new blood vessels are formed for its nourishment, and the growth slowly progresses until a large portion of the lung is involved; the other lung becomes affected after a time, and we have all the signs and symptoms of pulmonary tuberculosis. This new tissue is of an unstable character, and in some manner cuts off the blood-supply from the central portion of the oldest tubercles, which become necrosed, then break down, and thus form cavities.

I have made a long and careful study of these two disease-processes, which although entirely different, end in the formation of cavities in the lungs.—The accompanying illustrations, from micro-photographs, show the initial stage and full development of each form.

The lower left-hand illustration is taken from a lung injected with Berlin blue, and the injected vessels are seen in the nodule; the whole is composed of cells, *i. e.*, leucocytes, which have passed from the adjacent blood vessels by diapedesis in response to some irritation. This does not differ in any way from inflammatory exudation in any other organ or part of the body where some irritation exists, causing, immediately at that spot, a massing of leucocytes, that is, inflammation, which increases until a consolidation is formed large enough to be recognized. At no period in this disease-process is there any new tissue formed.

Taking the initial stage of this condition, as set forth in the left-upper illustration, we find a totally different process going on;

there is no inflammatory exudation; there is nothing acute about it, in the sense of an inflammatory re-action to an irritant. The first appearance of the lesion consists of one or more giant cells surrounded by a fibroid tissue, consisting of fusiform cells arranged in a kind of network; the giant cells vary greatly in point of size, but all are multinucleated. When this small tubercle has grown to some extent, other small tubercles are formed in its periphery until the consolidation reaches a considerable size; at the same time it is only an aggregation of tubercles.

We have, then, a portion of the lung that has become a mass of consolidation from the growth in it of an alien tissue which has entirely replaced that of the lung. This new tissue being of low vitality easily becomes necrosed, breaks down and is thrown off, leaving a cavity.

I have made a very large number of examinations of both these initial stages and have never been able to find the tubercle bacillus in either. Surely, if the tubercle bacillus is the cause of either of these lesions in the lung, it ought to be found at the commencement of the morbid process! Contrasting this with leprosy: In the latter malady I have made many examinations of the liver, where the disease is never so far advanced as in other parts, and wherever there were two or three new cells formed from the connective tissue of the organ, there I invariably found the leprosy bacillus.

Here then are two disease processes that are absolutely different in everything but their results, viz., cavitation of the lungs. The two upper illustrations exhibit the adult conditions.

I have already stated that tubercle bacilli are found in the inflammatory process after the lung breaks down. They are, in some instances, but not in all, found in a similar manner in the other process. Many cases are on record where no bacilli could be found during life, or even after death and, as far as I have been able to ascertain, these cases all belong to the second of these disease-processes.

It must be plain to any thinking physician that these two conditions can not be approached and treated in the same manner, and I think that it is of the utmost importance that the difference should be recognized at once on examining a case. I saw this well exemplified recently, when called in consultation to a child twelve years of age: A small consolidation existed on one side, about the level of the third rib; dullness was well marked, but moist râles were found round the edge; auscultation and percussion above the consolidation showed that the lung was performing its functions and that the consolidation did not extend to the apex. This at once removed any idea of the case being one of tuberculosis, but, on the other hand, showed it to be a patch of broncho-pneumonia, clearing up; and subsequent events proved this opinion to be correct.

I wish to point out that this new tissue which is formed in the lungs under the influence of the tubercular virus, differs entirely from that produced as a reaction to a chronic irritation; this is well shown by Doctor W. F. Metcalf, in his paper on "Pseudo-Tuberculosis," published in the May number of this Journal: There he shows that the prolonged irritation produced by the presence of the chitinous cheliceræ of an Ixode in the cutis vera, caused the formation of a nodule, the cells of which were entirely unlike any of the normal cells of the part; but these cells were also quite different from those of a tubercle such as I have described.

Pfeifer has lately described a pseudo-tuberculosis and Klein has confirmed his results; their deductions seem rather contradictory, but further work on this

subject may have an important bearing on tuberculosis. One thing seems certain: Many workers will now take up the pathological side of the question, when there will be a great deal of light thrown on these conditions; and I very much fear the child-like faith of the bacteriologists will be rudely disturbed.

92 Edmund Place,
Detroit, Michigan.

*RECENT EPOCH MAKING IN MEDICINE.

BY SAMUEL BELL, M. D.

At a meeting of the British Pathological Society, of London, April 6th, 1875, the "Germ Theory" of disease was first formally introduced, the discussions being very animated and earnest,—which also obtained at subsequent meetings. This conference was attended by distinguished medical men, some of whom were profoundly impressed by the arguments brought forward. The co-existence of bacteria and contagious disease was admitted, but Doctor Bastian, one of the most prominent speakers, contended that they are pathological products spontaneously generated in the body after it has been rendered diseased by real contagion. The grouping of the ultimate particles of matter to form living organisms, was considered, by the speaker, to be an operation as little requiring the action of antecedent life, as their grouping to form any of the less complex chemical compounds.

Prior to this, Henle (in 1840) after mature deliberation, collating and weighing of evidence, had arrived at the conclusion that the causes of infectious maladies are to be found in minute living organisms or fungi; hence he may be regarded as the true and original author of the "Germ Theory."—He formulated opinions and investigated the subject with such thoroughness and ability that, in after years, Koch adopted precisely the same views. In 1862, Pasteur published a paper on the "Organized Corpuscle existing in the Atmosphere," in which was demonstrated that many of the floating particles are organized bodies, and that these, when planted in sterile infusions, yield abundant crops of micro-organisms, evidencing that the source of life in the infusions was derived from the air. Listerism originated in 1875, and when Koch published his famous work on the *Wundinfectionskrankheiten* (traumatic infectious diseases), three years later, the Listerian theory took firm root, spreading slowly but surely to all departments of medicine and surgery.

From time to time, as the need was realized, men of genius have provided devices and instruments with a view to aiding in this work, and some of these have made possible subsequent discoveries.—Among these may be mentioned the use of sterilized culture fluids as formulated by Pasteur; the introduction of solid culture media and the isolation methods of Koch; the use of the cotton plug by Schroeder and Van Dusch; the introduction of the anilin dyes by Weigert and, finally; the improvements made in the compound microscope.

It is interesting to note that after the discovery of the anthrax bacillus by Pollender and Davaine, in 1849, there was a prolonged period, during which no important discoveries of pathological organisms were made, but during this period important methods of *technique* were elaborated. This was again followed by a period during which important additions followed each other in rapid succession: In 1873, Obermeier discovered the spirillum that bears his name and is deemed the source of relapsing fever; Hansen, in 1879, announced the discovery of a bacillus in the cells of leperous nodules; and Neisser during the same year demonstrated the *gonococcus;* in 1880 the typhoid bacillus was first observed by Eberth, and subsequently and independently by Koch; the same year Pasteur published his work on "Chicken-cholera," and the *pneumococcus* was described

*Annual Oration, Michigan State Medical Society, Battle Creek, May, 1901.

by Sternberg; in 1882, Koch announced the *Bacillus tuberculosis*, which was soon followed by Pasteur's work on "Rouget du Porc," while Loëffler and Schütz reported the isolation of the bacillus of glanders; in 1884 the "comma bacillus" was announced by Koch as the probable source of cholera, about the same time Loëffler discovered the germ bearing his name conjointly with that of Klebs, and believed to be that of diphtheria, and before the end of the year the tetanus bacillus was demonstrated by Nicolaier; in 1892 Canon and Pfeiffer announced the bacillus of influenza; in 1894, Yersin and Kitasato independently isolated the germ of the bubonic plague, and Sanarelli discovered the *Bacillus icteroides*, supposed to be the source of yellow fever.

During the last quarter of a century the science of bacteriology has made triumphant strides, revolutionizing all preconceived ideas and theories respecting the ætiology, diagnosis and even the treatment of infectious diseases; among those upon which information has been of greatest value are, tuberculosis, diphtheria, tetanus, bubonic plague, etc.

Up to 1875 there were few scientific men who accepted the germ theory, the great majority adhering to the doctrine of spontaneous generation, believing, with Billroth, that the presence of fungi, where decomposition was in progress, was an accidental result of universal distribution or (more conservatively) that their presence in putrid wounds was either due to spontaneous development or accidental and artificial introduction.

McFarlane was among the first of any prominence to accept the germ theory as applied to diphtheria: He says that all possible skepticism as to the specificity of bacilli was dispelled by an accidental infection that confined him to the house for three weeks during the busiest season of the year. Without having been exposed to any known contagion, and while experimenting in the laboratory with a virulent culture, the diphtheria bacillus was drawn into a pipette and accidentally entered his throat. As the result of this accident, two days later his throat was full of typical pseudo-membrane which contained Klebs-Loëffler bacilli.

Welsh, of Johns Hopkins, has perhaps furnished the most reliable as well as the most complete statistics of the results accomplished by the antitoxin treatment of diphtheria: Excluding every possible error of calculation, his report shows an apparent reduction of 55.8 per cent. in mortality. Another very important point made by this author illustrates the importance of early treatment, viz.: The fatality in 1,115 cases of diphtheria, treated in the first three days of the disease, was about 8.5 per cent., as against 546 cases injected with antitoxin after the third day, with a death rate of 27.8 per cent.—Thus was established the fact that early treatment is essential, and that after the toxin has set up destructive organic lesions in the various organs of the body, no amount of neutralization will restore the integrity of the parts; consequently, antitoxin fails to be of material benefit in the latter class of cases.

In 1884, Lusgarten devised a method for staining bacilli found in syphilitic tissue, which germs he assumed to be the cause of the disease. The most recent research on bacterium of syphilis is that of Van Niessen, who claims to have cultivated from the blood of a few cases, and by inoculation experiments obtained evidences of the specificity of the organism, by the production of abortion in pregnant rabbits; by the development of extra-genital primary lesions on the ears of the same in the form of nodes; and by the production of secondary ulcers, tumor-formations and irregular lesions. However the researches of others, up to the present time, have not been satisfactorily confirmative, and consequently the specificity of this germ is not established.

Considering our increased possessions in

the Far East, the importance of early recognition of the bubonic plague can be appreciated, especially when the United States Marine Hospital Service reports the introduction of this fell malady to the Western Hemisphere. Its appearance in Santos, Brazil, in October, 1899, marks an epoch in plague literature, as furnishing the very first recorded instance of the disease in the New World. During November of the same year the malady was brought to New York by a British steam-ship, and late in December, 1899, it made its appearance in Honolulu; its advent in California is so recent, that mere mention is sufficient.

This disease furnishes a striking illustration of the scientific advance of modern medicine, for it was not until 1894 that its true nature became positively known. All through the centuries, in all the countries, the subject had been enveloped in darkness, and there was a blind groping after facts, an unsuccessful search for cause, and the same ignorant struggle against its ravages, on the part of physicians, sanitarians and public officials alike, such as obtains to the history of cholera, a malady that now, fortunately, by the efforts of science, is robbed of its terrors. So, too, the cause of the plague, the mode of propagation and the measures essential to prevent its spread, are to-day matters of general scientific information. To Pasteur and Koch is indirectly due the credit of this discovery by establishing bacteriology as a science, though to a Japanese physician, Kitasato, and the French observer, Yersin, we are indebted for the discovery itself. The fact is now established that the plague is an infectious malady caused by a specific bacillus; and the anti-pest serum of Yersin and Roux, and the Haffkine prophylactic, have been tested with most gratifying results, the latter for the prevention of the plague, the former for its effects upon the bubonic poison whereby it is neutralized within the system. The French Commission that recently investigated the efficacy of the anti-pest serum in Portugal, report that the mortality was but fourteen per cent. against seventy per cent. of fatalities where the serum was not employed.

In a recent lecture by Roux, a striking illustration was given of the efficacy of the Yersin serum:

> The Bombay manager of the local branch of the Credit Lyonnaise resided with his wife, children, and a numerous retinue of native servants, in a dwelling in an infected portion of the city. His little daughter was stricken with the pest in a virulent form; was treated with the serum and made a rapid and uneventful recovery. As a precautionary measure the whole family were subjected to inoculation and the same measure of treatment was offered to the native domestics. Those who accepted escaped infection, while all of the six who declined were striken, five fatally. It seems that a more crucial test could not have been devised or a more triumphant vindication obtained.

The *British Medical Journal* gives the results accruing to the employment of Haffkine prophylactic in Bombay, which show a reduction in mortality of eighty to ninety per cent.

The work of the late Federal Commission in establishing the disputed fact that the plague existed in California, was a signal triumph for science and marks an epoch worthy of a place in the archives of modern achievement.

In 1896, Widal and Grünbaum, working independently, discovered that when blood-serum from typhoid fever patients is added to cultures of the typhoid bacillus, a definite reactive phenomenon occurs; this is known as the "Widal reaction," and consists in complete cessation of the characteristic movement, and subsequent agglutination, of the typhoid bacilli. The test was applied to two hundred and thirty cases of typhoid, among troops engaged in the Spanish-American War, treated in the Medico-Chirurgical Hospital, and of this number two hundred and nineteen reacted positively, or 95.64 per cent. The statistics derived from Osler's wards in the Johns Hopkins Hospital by Block and Gwyn, up to November,

1898, evidence that the reaction was present in one hundred forty-four of a total of one hundred fifty-one cases. Statistics further developed the fact that the reaction failed in only 4.5 per cent of cases out of a total of 2,393; and it is probable that even this small percentage would have been further reduced if the test, when negative at the first examination, had been repeated every day or two until convalescence was fully established. Without granting the precision of the method, it nevertheless may be assumed to be of great diagnostic importance.

Bacteriology is the outgrowth of the medicine and surgery of the past; and from being looked upon as merely incidental thereto it has become the dictator of the medicine of the present and future. Much valuable work has been done on the acute and chronic inflammatory diseases, also on the toxemias and bactericides.

Hæmatology, a comparatively new study, has become an adjunct to clinical diagnosis, but sufficient time not having supervened, the limits of its usefulness have not been fully determined; the evidences afforded, thus far, have been very disappointing sometimes—results accruing that were wholly unexpected, perhaps opposed to those sought,—while again, on the other hand, shedding far more light than could have been anticipated. The number of maladies in which its value is apparent are less than a half-score, but that it proves a decided aid in many more is not to be gainsaid; it may provide the missing link in a chain of otherwise incomplete evidence. On the whole, hæmatology in its results is not inferior to examination of urine; both give definite results in a few diseases, and side lights in many obscure conditions, even if the process itself is negative; and the former has one very decided advantage: It can be employed during the life of the patient, and like all methods of purely physical character, in all febrile maladies, and where there is any cause (such as insanity, stupidity or unconsciousness) preventing intelligent communication with patient, much light can thereby be obtained.

It is now conceded that *Anopheles,* a form of mosquito, may convey the parasite of malaria from man to man; even a *resumé* of the literature of the subject would consume so much time and space, I must, *per force,* be content with mentioning that, important observations by original workers are now being made in the tropics that promise more practical information.

The most striking feature in this connection, however, is the (apparently) definite establishment that the cause of yellow fever is present in the blood of those attacked thereby, and that certain mosquitoes can inoculate healthy individuals; also that the disease is not transferrable by fomites. This is regarded as a very important medical discovery, removing in large part the mystery obtaining to the ætiology of a malady that is, not alone the scourge of some of the fairest portions of the globe, but renders certain districts thereof practically uninhabitable to civilized man.

Relative to the cause of cancer, Max Schuller, of Berlin, and Roswell Park, of Buffalo, (and the co-laborators of the latter at the State Hospital), have accomplished some excellent work; Park reports having been able, in some of the lower animals, to produce true adeno-carcinomas by inoculation with fluid from the peritoneal cavity of a man suffering with colloid cancer of the omentum. Schuller reports* having found in both carcinoma and sarcoma a golden-yellow body, a protozoön, that he presumes to be the primary cause of these growths; and a culture thereof, when injected into a rabbit, produced cancerous tumors, while other cultures revealed the organism in different stages of development. The results of experiments now in progress, are

*Centralblatt fuer Bakteriologie, 1900.

awaited, both in Europe and America, with great interest.

Since the discovery of the Roëntgen rays, great advances have been made in the practical application of this mysterious form of energy. Somewhat reckless predictions, born of enthusiasm, have been indulged in, nevertheless they have proved of great diagnostic and therapeutic value, and time may be expected to establish more fully their scope and utility. At one time it was seriously feared that the prolonged exposure, deemed essential to successful observations, would limit their usefulness, but the improvements in *technique* that have recently accrued, permit of excellent results being secured with more brief exposures. Now, with our improved methods, a diagnosis is often possible, and with a precision that can not be obtained in any other way. By means of the radiograph, foci of tubercular infection can be made manifest to the eye much earlier than to the ear; a unilateral or bi-lateral enlargement of the heart, or any form of cardiac displacement, is readily discovered by the same means; emphysema, asthma, pleurisy, hydro-pneumothorax, pyo-pneumothorax, hydrothorax and pneumonia, are easily recognized and their limits defined; thoracic aneurysms are recognizable in their early stages; cavities which escaped detection by ausculation or percussion are revealed; and the presence of fluid within the pleura may be positively determined. Senn declared the X-rays as employed during the late war, "fully answered all expectations," and added:

> During the Spanish-American War the skiagraph enabled us to diagnose the existence or absence of fracture in a large number of doubtful cases in which we had to depend exclusively on this diagnostic resource. In fractures in close proximities to joints, it has been of the greatest value in ascertaining whether or not the gun-shot fracture extended into the joint. In the light of recent experience the X-ray has become an indispensable diagnostic resource to the military surgeon in active practice, and the suggestion that every chief surgeon of every Army Corps should be supplied with a portable apparatus, and an expert to use it, must be considered a timely and urgent one.

Manifestly the limit of usefulness of this aid has not yet been determined. It may be noted, however, that the rays have rendered valuable aid in the treatment of diseases of the skin, more especially lupus vulgaris, lupus erythematosus, chronic eczema, vascular nævi, hyper-trichosis, favus, and sycosis; also in other pathological conditions of internal organs.

During the past ten years, phenomenal advancement has been made in the diagnosis and treatment of diseases of the stomach; the cyromele has been invented; the gastro-diaphane perfected; a perfect gastric electrode introduced, likewise the gastric bucket; X-ray pictures of stomach have been taken; a large number of lavage apparatus devised; the gastroscope made fairly practicable; and a number of operative procedures devised.

In considering the burning questions of the day it is requisite to include the bacterial toxins, sero-therapy, organotherapy, auto-intoxication, and the relations of internal secretions to problems connected with the nervous system,—that part of the human organism which, in the main, is responsible for the lofty position which man holds among animals. The last decade has given birth to unprecedented activity in connection with the progress in neurology. The results obtained have led to complete revolution in ideas concerning the elements of the nervous organs and their mechanical relations, and supplied a host of new methods of investigation in the prosecution of the study of the nervous system in health and disease. Entirely new avenues of research have been opened up, and problems heretofore thought beyond the reach of scientific inquiry seem now within human grasp. So numerous have been the methods of original research pursued, that space and time forbid their review; I shall merely mention briefly

a few of the main achievements: Among the names which have shed new lustre on the subject of neurology is that of Ramon y Cajal, whose connection with original work has been both brilliant and fruitful. If popular history can be relied upon, the story of this young scion of Spain is remarkable, especially from a medical standpoint: Developing in a country not remarkable for original research, he applied for a position as teacher of the microscope, and was refused; whereat, being ambitious, industrious and proud he was keenly wounded. He then purchased a small library devoted to histology and microscopy, practically ostracised himself from society, and began his original work, paying special attention to *technique,* and as a result found himself, a decade later, famous. A brief inquiry into the contributions of Cajal can not fail to reveal why, since 1888—and in all parts of the scientific world,—his productions have attracted attention, and ultimately gained for him a professorship at Madrid, as well as notice and appreciation by international audiences. Among his original contributions are: "Demonstration of the Complete Independence of at least the Majority of Nerve Elements": "Appreciation of the Wide-spread Occurrence and Significance of the Lateral Branches of the Axis-Cylinder Processes," and: "Demonstration of the Striking Uniformity in General Structure of the Majority of Nerve Elements in all parts, Despite Minor Morphological Elements."

Since 1880, investigations of Golgi, His, Kölliker, Cajal and others, have produced a complete revolution in ideas relative to the elements of which the nervous system is constructed, and also of the mode in which these elements are architecturally put together. The Golgi method of staining tissue is now recognized by the whole scientific world, and the pictures of nerve cells and their processes secured thereby (incomparably superior to anything hitherto obtained) are regarded in the light of a new discovery. Cajal with his incomparable genius made new applications of the Golgi method, which have attracted wide-spread attention, and anatomists everywhere (von Kölliker and others in Germany, van Gehuchten in Belgium, Retzius in Sweden, Schäfer and Andriezzen in Great Britain, Berkeley and Strong in America, and a host of others) set to work with the osmo-bichromate mixture and silver nitrate, and in a short time a new era was opened up, and information supplied regarding the reciprocal relations of nerve units in the various parts of the cerebro-spinal and sympathetic nervous systems. The connection of the axis-cylinder processes of the cells of the neutral horns with the axis-cylinder of the fibres of the motor roots of the spinal nerves, were first absolutely established by Weigert's methods coupled with the method of Gerloch. —This, in conjunction with improved *technique* in sectioning, has contributed greatly towards the investigations in neurology.

In 1891, Waldeyer brought out the doctrine of individuality of the nerve elements, or the "Neuron Concept," which may be briefly condensed as follows:

The nervous system, aside from its neurolgia, ependymal cells, blood vessels and lymphatics, consists of an enormous number of individual elements of neurons, each neuron in its entirety representing a single body or cell. The foundation for the neuron doctrine rests upon these facts:

The nervous system agrees with other parts of the body in being cellular:

The proof that in the embryo the nerve cells exist as independent units, many of which are capable of wandering for considerable distance from the origin:

The fact that the nutrition of the nerve cells is most easily explained from the standpoint of a doctrine which looks upon the nervous system as made up of units, which are not only anatomical but physiological.

Since this doctrine was advocated a

large amount of work upon degeneration of nerve-fibre and cells has been done, especially by Marchi, which confirms the validity of the neuron doctrine, the latter being of value in enabling the histologist to follow the diseased nerve-fibre to its termination. The conception of the neuron has helped to facilitate the understanding of some diseases, in showing that there is no cardinal distinction between gray and white matter; and it likewise served to unravel, in part at least, the mystery which formerly surrounded those diseases that involve, almost simultaneously, the various systems of white fibres and the gray matter. Proportionately with the growth of the neuron concept the value of systemic diseases is lessened.

Do what we may, we can not separate mental diseases from organic affections of the spinal cord and, indeed, of many other organs of the body. The line of demarcation between the mental and physical conditions is so indistinct that, in many instances, one merges into the other. One of the foremost alienists of Europe latterly declared that psychiatry is on a level with the medical sciences of a hundred years ago, being based wholly upon clinical studies and not upon pathological anatomy. A few years since, Doctor Weir Mitchell, during his annual address to the American Medico-Psychological Association, indulged in severe criticism upon the lack of scientific work in hospitals for the insane, which aroused no trifling indignation. That abundant material for scientific work exists, both clinical and pathological, is undeniable, and that there has been marked advance, both in the character of the clinical work and in honest endeavor along ætiological lines, is conceded. That greater advancement has not been made can not be attributed wholly to inertia on the part of those in charge, but is largely due (especially in relation to causation) to the well known fact that the morbid pathology of the brain is more complex than any other part of the human organism. The asylum reports instead of being given over to stereotyped data, as formerly was the case, to-day are fast becoming store-houses of useful information regarding all that pertains to the care, cause, and treatment of the insane. To the practical psychiatrist the question of domiciliation does not overshadow every other desideratum, as in the past, and during the last decade the importance of early diagnosis, the accompanying pathological conditions, prompt separation from domestic surroundings, and skillful treatment (mental, moral and physical) have become questions of paramount interest. Closely trained observers, records of clinical facts, also systematic laboratory work, are now the rule rather than the exception in many institutions: Pleasant, cheerful rooms have taken the place of darkened cells; airy courts are provided, along with beautiful grounds and attractive architecture; the Kirkbride system has replaced the old quadrangular buildings, and the cottage pavilion, in some form, is fast superseding all others; finally, the specially trained, and skilled nurse has been substituted for the ignorant (and sometimes careless) attendant.

The work of Meynert on the cerebral cortex, and the researches and experimental labors of Charcot, Flechsig, Wernicke, *et al*, have done much to illumine conditions hitherto obscure and considered impervious; the labors of the New York Pathological Institute, under the leadership of van Gieson, have received the recognition and commendation of many of the original investigators of Europe as well as America, and the original contributions of Berkeley to the pathology of brain lesions, have stimulated the study of psychiatry in insane hospitals everywhere. It is the spirit and honest endeavor on the part of those interested in the science of psychiatry (together with the increase of insanity over and above the increase in

population) which makes possible a psychopathic hospital in Michigan in connection with institutions of learning, exactly as such are now established in connection with the older universities of Europe. At the present time there is no branch of medical science which offers so many interesting problems for solution; and though the past has been full of disappointments, the future is full of hope.

We begin a new century under most encouraging auspices. That just closed will go down into history as one marvellous in scientific achievement, especially in many departments of medicine and surgery, and as marking the close of the career of dogmatic medicine; but there are still many important subjects that require careful and profound consideration. Fortunately, science recognizes no nationality; from Germany, Belgium, Sweden, Russia, Italy, France, Spain, Japan, South America, England, Canada and the United States, come reports of work that embody the spirit of scientific research to an eminent degree. What of the future? That more brilliant achievements are soon to follow, few can doubt. Serum therapy is yet in its infancy, and although one of the crowning triumphs of the Nineteenth Century, there are certainly great possibilities as regards its future scope and employment.

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EXTRACTS FROM THE JOURNAL OF A NAVAL MEDICAL OFFICER.

(Continued.)

December 2d.—The weather has been unusually tempestuous for the last week or so, and high winds and frequent showers of rain have been the rule, so that, though the anchor was once hoisted to go outside for target practice, we returned the same day without doing anything. Fortunately the inside anchorage is so protected by a reef, that there is never any sea no matter how high the wind, and there are never any hurricanes here. Our ship is anchored very close to the shore, that is to the reef—not the landing in the town,—and like all craft in the harbor that desire it, we have a telephone while in port. The reef is the inevitable coral formation found generally throughout the Pacific, and with its crest-line of white breakers, dividing the apple-green or amethyst shoals from the blue of the ocean, under a bright afternoon sun only now and then obscured by a swift passing cloud bringing with it a spoonful of rain, is beautiful with a beauty unequalled.

Yesterday I went ashore, and there being less wind and rain than usual, made another trip out the Nuuanu road. On the way up I observed a sight that was very amusing: A white house with large, well-kept grounds, numerous trees, shrubbery and flowers, presented quite a menagerie. If of nervous disposition, one is apt to be alarmed by seeing a full sized lion, apparently stalking across the grass toward him, with only a low fence intervening and offering protection. The animal's eyes are large and the whites very prominent, which give him an expression of mingled pain and ferocity that becomes ludicrous when it is discovered the creature is of cast metal. There are at least half dozen of these formidable brutes, all loose, without even collar or chain, standing in the rank grass without a pedestal or platform for their poor feet, and their bronze or cast iron fur is quite mouldy with damp. These are not the only sham animals on the premises; there is at least one deer, the most wildly impossible quadruped imaginable; also certain white statues of young women, presumably marble, but which I suspect are after all but ordinary cast iron, whitewashed. The lions are full grown, and rather much for one's nerves, inasmuch as they are artfully arranged, apparently lurking in the recesses of the shrubbery, yet visible to the wary traveller, and besides very white eyes, are well toothed in deeply lurid jaws.

I paused half way up the Nuuanu road, *mauka side* (that is seaward side) to take in the view, upon which I have expatiated before. I may as well say, right here, that *mauka* is a word of great resource among the natives, and in this instance means the side furthest away from Honolulu.

I have before spoken of the little spring a few hundred yards down the cliff towards the valley beyond the *pali;* also that both

men and women here ride boldly. While lingering at the spring I heard a clatter, and up came a cavalcade of some sixty or seventy ponies and mules, all with little packs on their backs, driven by Chinamen, who all dismounted at the top of the *pali*, which natives would never have thought of doing. These islands are a perfect paradise to the Celestials, and they travel about a great deal; and although cutting most awkward figures, they can ride, or at least stick on, or do anything else necessary to their business; and they go fast and slow according to the needs of the time or place with the same stolid indifference they show in the laundry. They frequently intermarry with the natives, and the type resulting is rather peculiar and not unpleasing. The remarkable thing about the Celestial is his ability to adapt himself, in his peculiar way, to anything and everything, consequently he is found in every form of business where money is to be made. Somehow there always seems to me something strange and almost uncanny about these guttural jabbering people, though why, I cannot say.

The walk up and down the Nuuanu road was more interesting than it would otherwise have been on account of the great number of roadside flowers and weeds which, though seldom of any size, were so plentiful as to give decided color (in patches), to the landscape. A purple flower of the mint family was about the only one that reminded me of our vegetation at home, except some convolvuli which were everywhere apparent. There was also a very bright yellow fluffy ball of a species of mimosa; a pure blue but very delicate flower like a forget-me-not; and variegated clusters of a blossom which I thought I ought to know but could not place—all so thick as to make the outer edges of the road, and banks of the ditches and taro-patches bear resemblance to the borders of a flower garden, and withal it must be remembered this is in mid-winter. I think there is rather a large variety of plants indigenous to these islands, but hundreds more have been introduced as ornaments, or for utility, from all parts of the world. The other day Mrs. Afong (of whom more anon) gave me a blossom of the ylang-ylang from a tree in her garden, the odor of which was wonderfully penetrating. All classes of Hawaiians, as well as the South Sea Islanders, are passionately fond of flowers and bright colors, especially red; even the cannibals of the Solomon Islands have this taste.

Walking into town on my way back I observed many fine places, though perhaps not very carefully kept, but with plenty of trees, royal palms, date palms, algarobas, bread-fruit, etc. The Afongs possess a noble banyan, the only one I know of in the city; and cocoa-nuts are only too common.

December 5th.—The weather here can hardly be fancied for this time of year. It is not really hot, neither is it always cool or comfortable; though bright this morning, in the afternoon it turned out showery, as is usual at this season. In the main, blue uniforms are more suitable than the white ones. The rain, however, has brought out a wealth of flowers, especially roses, very fine ones being visible on every hand.

I just broke off to burn a piece of camphor on account of the mosquitoes that appear unusually ravenous and blood-thirsty—this procedure, which has the sanction of "authority," never proves very efficacious. On shore the Chinese have curious ornamental furnaces, made from some sort of white metal, in which they burn a powder, sometimes of sandalwood, sometimes *Pyrethum rosum*, better known perhaps under its pseudonym of "Persian Insect Powder;" the art of the thing is, that the powder is poured over a little iron mould, which is then withdrawn leaving the contents divided into continuous ridges, so that when a match is touched to one end the fire creeps and smoulders along evolving smoke for a couple of hours or so—if the powder was simply piled up it would all be consumed at once.

Off Lahaina, December 10th.—We arrived her yesterday for target practice and are bound for Hilo, on the island of Hawaii. The ship is under weigh, with her great guns going, and while I am writing, every now and then, if one of the after battery is fired, my ink-stand fairly jumps from the table.

I presume there will be no opportunity to visit the shore here, hence my description is merely of what can be seen from the deck or from a port. There is a strip of low green land, apparently level and fringed with cocoa-nut trees, just inside the shore-reef. The slopes beyond, and towards the mountain ridges that form the background, are green with sugar-cane and other crops; then there are rifts or deep ravines intersect-

ing the ridge; and finally a *pali* that appears inaccessible. From the ship—we are twelve or fifteen miles off Maui—we can see the islands of Molokai, Lani, Kahoolawe and Hawaii, including the famous extinct volcano of Haleakala, with the largest crater known, which rises on our port beam nearly 11,000 feet, and so huge as to appear dome-shaped. This volcano is separated from the Lahaina district by a low sandy ridge. As we coast along, with the aid of glasses I am able to detect quite a number of little secondary craters that rise out of the bulk of the mountain; and I am told there are scores of cones within the main crater, which is twenty-eight miles in circumference. One very perfect cone appears to rise from the sea-bottom, as it is entirely surrounded by water. It is a long time since this volcano has exhibited evidences of activity, and on the last occasion its force appears to have been exerted from northwest to southeast and all along the chain from Kauai to Hawaii.

Hilo, December 27th.—This is a most enchanting little settlement half hidden beneath a wealth of flowers and a forest of bananas, bread-fruit and coffee trees, with here and there thick clusters of cocoa-nuts shooting high in air waving their leaves and rattling trunks in a very indolent and graceful style peculiarly their own. Then the deep, velvety verdure around gradually rises in green slopes and recedes far away in the distance, until the scene is closed by the "twin giants of the Pacific," Mauna Kea and Mauna Loa. Nearer, along the shore, are silvery rills leaping into the sea; and the bay is constantly alive with canoes and boats, with their broad paddles flashing in the sun, each holding two or more chattering, gesticulating natives, offering for sale tempting tropical fruits reposing dewily in leafy baskets.

Neither is the town disappointing on closer view. The richest and most dense of tropical foliage shades and almost obstructs the pathways; pretty huts of thatched straw, cottages, and even more pretentious dwellings are embowered in groves and shrubbery, while flowers abound in profusion on every hand; streams of limpid water murmur in every direction, and the cool trade-winds blow breezily through the foilage—alltogether the effect is most Arcadian and quite exhilarating. Then, always when we go ashore, there are large numbers of copper-hued natives, rigged out in the gayest colors, waiting to receive us, including a stout individual with a most important air, and a crown embroidered on the sleeve of his coat which, along with a short baton, conveys the information he is a *Kaiko* or "king's man," in other words an authorized guardian of the peace.

On Sunday I happened in front of the native church just as the congregation—something like eight or nine hundred people—was coming out. There were ancient matrons in dazzling print frocks, cut very high in the neck and very low at the heels, but unconfined by either belt or bodice, each with one or more pieces of ancient millinery appertaining to a long forgotten era, gaudily decorated and perched high upon their sinciputs and conveying the idea they had been put on wrong end foremost,—as was the actual fact in many instances; young damsels attired in gaily colored shawls and ribbands, their nether limbs encased in a superabundance of hose and strong brogan shoes; venerable, gentlemanly *Kanakas* in tightly fitting trousers and swallow-tailed coats unconscionably short in the waist, and ditto long in the skirts, while others were only saved from appearing *in puris naturalibus* by a flimsy shirt, or fold of *tappa* wound about the loins, breech-clout fashion.

Hawaii, or properly, Owyhee, affords a fair glimpse of primitive island life, being less visited than other portions of the group; but the natives have, apparently, lost little by this fact. They still preserve, in some degree, their old habits and heathenish customs, and many deep-rooted and immoral practices still obtain. Nevertheless, it strikes a stranger with surprise to find these demi-barbarians can all read and write, and that the well-defined caligraphy of the Hilo nymphs will compare favorably with that of the most fashionable style of the art in young ladies' seminaries and "finishing schools" at home; they also pay strict observance to the "Sabbath" (outwardly at least), have a general, even though slip-shod, knowledge of the Scriptures, and many possess a tolerable education. The natives, moreover, are amiable, good natured, though indolent beings, and approach nearer to the *toujours gai* than any people in existence; nevertheless, let no one imagine from their simplicity of manners, he can win their hearts with gimcrack jewelry, glass beads, and baubles of that ilk! Peradventure he will discover

they have as correct an appreciation of silver, and can drive as sharp a bargain as ever the Jew out of Jerusalem. Still they are obliging and will attend you all day in tramps and excursions, apparently well satisfied with a trifling present of cigar-stumps.

Among the favorite dishes is that of raw fish, and as a great rarity a *luau* dog. Under the most solemn pledges of secrecy, I was permitted to witness the exhuming of one of these animals, with the privilege of dining therefrom in case he was found palatable. These solecisms on modern cookery and viands are severely frowned upon by their white teachers and pastors, consequently it was with much caution I was taken to a small hut in the outskirts, where, when a venerable *Kanaka* had been placed on guard to prevent surprise from *Kaikos*, the entertainment began. First, a huge calabash was placed on the ground filled with the National preparation of *poi-poi*—a white mixture made of mashed and fermented taro, of the consistency of paste and a flavor of sour starch; and it is not considered the *mode* to eat it with aught else but the fingers—one, two, three, or the whole hand, according to its liquidity. The Hawaiians beat the Neapolitan lazzaroni in dextrous use of their digits and digestions, for whereas the latter can only suck down several continuous leagues of macaroni without a bite, and be satisfied, the *Kanaka* will make a cone of hand and fingers, and with the whirling velocity of a water-spout, takes up enough of the plaster-of-Paris-like liquid to make a thorough cast of mouth and jaws, with the energy to repeat the impression every minute! No wonder the natives, for most part, are pot-bellied! Where all the stuff goes too is a mystery. It has been suggested that they are hollow, like bamboos, down to their heels; but it is a mooted point. I tasted the *poi-poi* by way of an appetizer, and felt no further indication to make a hearty meal, especially as I knew it had all been chewed at least once in the making, and the fact the operation is generally performed by white toothed maidens, and that success depends upon the thorough admixture of saliva, did not tend to render the dish any more palatable.

By the time the *poi-poi* had disappeared, the stones and leaves were taken from a sunken oven in the corner of the hut exposing the *bow-wow* to view. The warning of *cave canem* which I had seen in former years at Pompeii never struck me forcibly till now! I had heard, too, a metaphor to the effect that the "hair of a dog is good for the bite," but the moment I beheld the entire animal with his white jaws and tongue lolling, I felt no indication for even the bite—lost my appetite and came quickly away, with the intention of turning informer, and sending the *Kaikos* in among the party.

While dealing with Hawaiian *cuisine* I may as well speak of some other matters pertaining thereto: The manner of fattening these interesting and delicate animals is not dissimilar to the process of cramming turkeys with walnuts, or geese preparatory to having their livers turned into *patê de fois gras*. These animals are of a peculiar kind—short-legged and domestic. The feeder takes a mouthful of *poi-poi*, and after masticating it to proper consistency and shape, seizes his victim by the throat, chokes the jaws wide open, and drops the contents of his own oral-cavity into that of the brute—it is said violence is only necessary with puppies, for on becoming older and docile they take to this diet more kindly. I have twice partaken of *luau* turkey—fattened by the same process, and considered by the natives as only inferior to *luau* dog,—but it proved on both occasions to be a most insipid dish. The gobbler is stripped of his plumes, cleaned, dressed, stuffed with a green cabbage-looking vegetable known as *luau* (hence the peculiar title), carefully swathed like a mummy in damp banana leaves, and laid on a native oven of red hot stones, all covered thickly over with more leaves until not a chink or cranny is left for the escape of heat or steam. How long the bird is compelled to undergo this operation, I do not exactly remember, but on sitting down to the table, he was ushered in on a huge platter in his green winding-sheets, and after removing the outer coatings presented a whitish par-boiled appearance, half-drowned in a pulpy mass of *luau*, and fell to pieces at the first touch; he was steamed to death. There was not a trace of turkey flavor left, and I thought it the worst possible use he could have been put to; albeit the vegetable was delicious and in the main made amends for tasteless fowl.

(Continued.)

DETROIT MEDICAL JOURNAL
A CONCISE MONTHLY
EPITOME OF PRACTICE AND THERAPEUTICS.

DR. G. ARCHIE STOCKWELL, Editor.

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DETROIT, MICH., SEPTEMBER, 1901.

DEMISE OF PRESIDENT MCKINLEY.

We stop the press to announce this deplorable and sorrowful event which, though sudden, was not altogether unexpected by medical men who had carefully followed the results accruing to the assassin's bullet.

"In multiple counsel there is safety" is an ancient and threadbare aphorism that, however true in its application to ordinary affairs, in conditions like those surrounding the bedside of the martyred Chief-Executive is apt to prove delusive. We have no wish or purpose to criticise adversely the medical gentlemen in attendance; admittedly each, individually, is a man more than ordinarily professionally endowed, and possessed of considerable more than a mere local reputation; but on the other hand we can not but feel the sufferer and his medical advisors alike were sadly handicapped by the results accruing to popular clamour, and the demand that no measures, however extraordinary, be left undone—such generally results in overdoing, especially when the patient is possessed of great prominence, and the facts are taken into consideration that, amid a multitude of counsel, clashes of opinion are possible, and no medical man, except one possessed of unusually strong personality, would, in the face of the adverse opinions of colleagues, (and the certainty of misjudgment on the part of the public and professional press), dare to act in any way independently, or to overstep in any particular the boundaries of accustomed routine. We certainly would have had more hope, from the first, if the President had been relegated to the exclusive care of one or two individuals.

Also, we can not but deprecate the unseemly attempts to secure advertising for self and friends on the part of individuals, which led to the importation of an alien nurse, and (at the last moment, when the fatal termination had become inevitable) of physicians from far away cities; both acts appear to reflect upon the ability of those in attendance, and particularly upon nurses and medical fraternity of Buffalo.

Again, the excluding of Mrs. McKinley from her husband's bedside, and the denial of the accustomed cigar—which was craved, and asked for, and could have worked no possible harm, while it might have obviated certain adverse phenomena—smack of the torture-chamber and mediæval superstition more than anything else: —Does not one suppose, if Mrs. McKinley is the woman we take her to be, that these procedures had her sanction, though exclusion was made to appear solely in her interest! Here we have two factors that, seemingly, in the minds of most, of little importance, may have had direct influ- in securing the untoward result. Nothing is more depressing to an invalid than an enforced quiet without any form of physical or mental occupation, especially when surrounded by strange attendants. Apparently, not only was Mrs. McKinley very carefully excluded, but her spouse was left to the "rule-of-thumb" care of an alien "trained" attendant.

We learn the immediate cause of death was "gangrene of both walls of the stomach and pancreas." It seems passing strange, in the face of previous reports (emanating apparently from authority) that such condition could have existed without being suspected; the character of the pulse, to say the least, was such as to lead to a surmise that some untoward event was threatening.

One of the theories propounded is, that the bullet of the assassin, with a devilishness almost unprecedented in modern times, was deliberately poisoned, for the purpose of making the fate of the victim doubly certain. This, however, seems highly improbable.

Undoubtedly, there yet remain many facts to be made public that are of interest to the medical profession, and accordingly we await the official and authoritative report. Such data as are at hand, coming as they do through the Associated Press and filtered through the hands of non-professional editors, are altogether meagre and unsatisfactory.

The political lessons of the tragedy are many; it is hoped they will be taken full advantage of as regards the future. It is possible that the "grief of the Nation may ultimately prove the Nation's salvation" in the matter of eradicating the anarchistic and other obnoxious socialistic elements.

Fortunately the executive chair will now be succeeded to by a gentleman possessed of no less great personality than Mr. McKinley, one moreover whom the breath of scandal has not been able to touch, and whose high rectitude and honesty of purpose is unchallengeable.

[redacted]

Cajuput Oil.

The advent of oil of *Melaleuca Leucadendron* dates back to 1715 when it was introduced to Europe via Amsterdam. An apothecary very properly was responsible for the introduction, but it appears to have languished a century after this before London took it seriously under consideration. During the cholera epidemic of 1830 it came into wide repute, which has since been sustained, more or less, as a valuable diffusible stimulant, antispasmodic and diaphoretic. Unfortunately, owing to its high price, oil of cajuput (*Oleum Wittnebianum*) is subject to adulteration, and the vast majority of that offered in the market is nothing but a mixture of turpentine, oil of rosemary, camphor and bruised cardamon seeds, treated with a little milfoil to give the requisite color. Oils of camphor, lavender, origanum and rosemary frequently serve for adulteration.

The true oil, when taken internally, causes a sensation of warmth in the stomach, excites the action of the heart and arterial system, and subsequently induces copious diaphoresis.

In gout and rheumatism much benefit follows both the internal and external use of this agent; in retrocedent gout it is particularly serviceable in doses of from five to six drops, frequently repeated. It is occasionally of great service, employed both internally and externally, in neuralgic affections, but is inadmissible if the malady is connected with inflammatory conditions.

Immediate relief attends its exhibition in flatulence and flatulent colic, maladies in which it has never been known to fail. In typhoid and other low forms of fever it may be judiciously prescribed as a stimulant; so too, as an antispasmodic, it proves valuable in convulsions attended by debility or anæmia.

It has been recommended in epilepsy, but its value is somewhat problematical except when the disease is associated with hysteria or with great nervous depression; but in hysteria, even in considerable doses it appears to be inferior in action to either asafœtida or valerian.

In spasmodic cholera the oil has been highly lauded, and in some instances its action has appeared to be almost magical; on the other hand it has frequently failed to be of any real benefit, which possibly may be due to the fact that an impure product was employed.

All in all, cajuput oil is a remedy of great power and value, one too much neglected in general practice; but it is demanded when this drug is employed that its purity be definitely assured.

Two Novel Claims.

In the *Medical Record* for July 13th., appears two novel communications which, undoubtedly, will attract considerable attention:

One, on the "Ætiology of Alopecia," by Doctor Delos L. Parker, of Detroit, advances the theory that this malady is due to auto-intoxication through absorption of decomposed organic matter present in the residual air of the lungs, and upon which the author bestows the title *Trichotoxicon*. Experiments upon pigeons, that were inoculated with a solution of respired air in water, seems to confirm the claim, but lack satisfactory negative and control evidence. This is a very interesting communication, whatever the verdict of the profession may be.

The second is the claim of one Doctor H. Holbrook Curtis, that he immunizes hay-fever sufferers by administering a preparation purporting to be made from the pollen of certain plants, more particularly "ragweed" (*Ambrosia trifida*), golden-rod (*Solidago odora*), etc. What is more remarkable is the fact that this paper, though read before the American Laryngological, Rhinological and Otological Society, prior to its appearance in the *Record* had been distributed broadcast as a part of the advertising literature of a well known pharmaceutical house; also the unsigned "testimonials" read very like those that obtain to patent medicine almanacs. Hence it is a matter of considerable surprise to us that this paper obtained place in a publication of the standing of the *Record*. The "ear-marks" to say the least, are those of a proprietary product, and the text affords no positive or conclusive information as to the character of the compound, while the title, is manifestly intended to be "catchy."

We opine the concern that has undertaken to market this preparation, will find it has committed a grievous error, particularly as it has hitherto been held to be immaculate in the matter of foisting upon the profession products of doubtful character.

Fighting the Nile Sudd.

The difficulties and dangers of tearing a passage through the dense masses of floating vegetation which periodically obstruct the Nile, making navigation impossible, are well described in an article which appears in the August number of *Pearson's Magazine*. A free waterway has now has been opened up the river as far as Uganda. In all fourteen blocks of the sudd, as the drifting marshes are called, have been removed, the total length of the river cleared being eighty-three miles. The actual work was done by some 750 Soudanese prisoners under the direct orders of two young officers of the British Royal Navy. The following is an extract from a journal kept by one of them:

> Now, as to how we do it. On arriving at a block we tie up the steamer, and set everything on fire, then cut down all the dead papyrus, which is on the sudd, until it soon looks like a very rough field. Then this field is dug into small sections four or five yards square; the trenches are dug to about two feet under water, the sudd itself being one, two, or three feet above water, and from six to ten underneath. Next we put pieces of wood round our section (cut up telegraph poles), fix a wire hawser round the section, shoved well down in the trenches and behind the posts, and bring the two ends on the steamer. The steamer then backs astern, and eventually pulls out the section, which floats away down-stream. The wire is got on board again, the poles are recovered, and the steamer proceeds for another section. The force and jerk which the steamer brings on the wire severs the roots of the section underneath from the others—or at least something does! That's the idea.

It is expected this work will have a material bearing on the fevers, especially those of malarious character, peculiar to the upper Nile region.

EDITORIAL NOTES.

Epilepsy and the Bromides.—

The bromides, unfortunately, have been widely heralded as specifics for epilepsy; yet no claim can be farther from the truth. They may temporarily suppress epileptic attacks, but only during the period in which they are exhibited to the point of saturation; they are in no sense remedial.

Again, a great deal of the trouble ac-

cruing to the administration of this class of agents is due to the selection of a poor and cheap salt. Bromides of potassium, of ammonium, of lithium, etc., are unpalatable and in the main unsatisfactory, the stomach quickly rebelling against their administration. If one must have a bromide, select one that will not upset the stomach and interfere with digestion and assimilation. The sodium salt is the only one that fulfills this demand; if dissolved in water it affords a fairly palatable, even refreshing draught; it may, moreover, be employed for a long time, in maximum doses, without any untoward results and carries with it a larger percentage of bromine than most other salts.

Epithelioma.—

A writer in the Chicago *Medical Times,* asserts as the result of "forty years experience" that extirpation by the knife is much less efficacious than the employment of a paste of zinc chloride—"for some reason the same amount of tissue sacrificed by the knife will give far better results if destroyed with the caustic; with the former recurrence is the rule, by the latter, the exception." The claim is likewise made that "chloride of zinc has as great efficacy and is as certain death to cancer cells as is quinine to malaria."—The latter part of this quotation is certainly a trifle foggy.

How about lactic acid which is practically harmless to healthy tissue, but inimical to the adventitious or neoplastic form? The latter has been successfully employed to destroy growths that recurred within three weeks after expiration, and at the cicatrix.

Oleum Jecoris Aselli.—

Doctor Jones Greer of Newport, England,* takes exception to this authorized and official synonym of cod-liver oil. He remarks:

"Asellus signifies a little or young ass. This word has also been extended to fishes, as the cod (*Morrhua vulgaris*), which have the color of the ass; at least, Varro, in speaking of fishes named from their color, mentions the asellus, or cod, as deriving its name from this circumstance. Those therefore who trust to a dictionary might not be able to tell whether *oleum jecoris aselli* meant the oil of a cod's liver or the oil of the liver of an ass. In 1839 the latter translation was actually adopted by a writer in a medical journal, who gravely told his readers that the Germans had been using oil of asses' livers for fifteen years!"

Doctor Greer's quotation, derived from a foot note on "Lac Asellæ" in *Selecta e Prescriptis,* is interesting as exhibiting the uncertainties of philological derivation.

*The Lancet, London.

Preservation of Anatomical Specimens.—

Pathological specimens are best preserved by the aid of formalin, which has the effect of retaining the natural colors of the preparation. Judging from the specimens shown, the result, so far as preservation of color is concerned, is everything that can be desired. The process requires both patience and experience to obtain the best results, but its introduction marks a new era in the preservation of museum specimens, the decoloration of which, under the methods hitherto resorted to, constitues such a serious drawback to their educational value.

—*Medical Press and Circular.*

Equally as valuable, and perhaps even more effective, is a mixture of methyl alcohol, sulphurous acid and glycerin, equal parts. Morbid specimens placed in this fluid, after proper preparation and cleansing, may be kept almost indefinitely without either shrinkage or loss of color.

Brucine for Children.—

It seems not to be known that for patients under ten years of age brucine is a much better, and every way more effective stimulant (though milder) than strychnine.

A solution of brucine, newly made, moreover, is a very satisfactory topical analgesic: the "earaches" of children may often be effectually relieved by inserting in the auditory meatus a pledget of cotton saturated with this fluid.

Colds.—

For the relief of coryzas vegetable charcoal is suggested by Doctor T. M. Stewart, of Cincinnati. He states the remedy is particularly indicated if there is irritation of the trachea and bronchi with mucous expectoration, chilliness and light colored urine.

Cystitis and Urethritis.—

One of the most valuable agents for the relief of either of both these conditions is corn silk, and to secure its best effect the medicament should be exhibited in the form of an infusion made from the freshly gathered drug, and newly prepared every couple days or so. When the *Stigmata maydis* is out of season, a "German tincture" will do very well from which to make the infusion.

The dose should not be less than one drachm, and gradually pushed to one ounce, or a half wine-glassful. That this drug is a valuable adjunct in the management of gonorrhœic cases is self evident.

Leucorrhœa and American Women.—

Not only do our women have leucorrhœa to an unprecedented extent, but they suffer from many other forms of disease of the sexual apparatus, more than women of other countries. Certainly something is wrong to produce this condition so universally, and one can not but believe our social laws need radical revision. The corset is accused of being the chief factor, but this is doubtful, for French women, even more than Americans, are addicted to the monstrosity, which has survived, in some form, several centuries. The artificial conditions of life; the improper foods commonly ingested; habits that inhibit proper tissue tonicity; and the freedom with which the sexes commingle, even at a very early age, are undoubtedly more at fault than any article of feminine apparel.

Gonorrhœa.—

The latest fad in the treatment of this form of the venereal is a solution of zinc acetate and albumen naphtho-sulphonate. It is however, no way superior to dozens of other remedies possessed of astringent and aseptic tonic properties, and vastly inferior to the hot-water douche. The error universally made, is neglect to order the patient to bed, and *keep him there* until cured! If this rule is followed almost any of the medicaments recommended for the topical treatment of this malady are effectual.

Chinese Yeast.—

The substance known as Chinese or Javanese yeast is largely used in Eastern Asia for the fermentation of rice. This fungus, which has the power of exciting fermentation, has been made the type of an indepedent genus, *Amylomyces;* but Wehmer, in *The Pharmaceutical Journal and Transactions,* shows it is a true *Mucor,* and hence gives it the specific title of *M. rouxii.* It ferments levulose, dextrose, galactose, sucrose, lactose, maltose, and inulin, with the production of alcohol. It is accompanied by another undescribed species of *Mucor,* which also takes part in the fermentation of "ragi," and is named *M. javanicus.*

Alopecia.—

For some years the item has gone the rounds that pilocarpine was an effective remedy for alopecia. The fact is, however, it has never been observed to have any effect upon the disorder, whether administered internally or applied topically.

Each case of alopecia demands to be studied by itself and prescribed for according to its nature. Disinfecting and stimulating remedies are most in demand, yet it must be acknowledged that our therapeutics are for the most part powerless, and that the rare cures which result are not so much due to medication as to spontaneity.

Diabetes Mellitus, Potatoes in.—

It has long been a moot question as to whether potatoes may have a place in the dietary of diabetics. Recently this has been decided by Mosse*, at least to his own satisfaction: He declares the tubers may be given to the amount of two to three pounds daily, and as a substitute for the whole (or part) of the bread allowed, and that

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**Klinische Therapeutische Wochenschrift.*

the cases which respond best to such management are those of medium intensity and of the arthritic type. Two cases are cited in evidence of the wisdom of this decision in which "there was prompt decrease in the amount of sugar excreted in the urine."

Milk, Artificial Coloring In.—

A simple method to detect artificial tinting of milk, is to precipitate the coloring matter on fibre. If anatto, for instance, is suspected, render the sample of milk alkaline with sodium bicarbonate and then partly immerse it in a strip of white filtering paper, allowing to remain several hours, —Anatto imparts to the immersed paper a yellow tint. The same method may be employed to detect methyl-orange, excepting that ammonium carbonate must substitute the sodium salt, and clean white (absorbent) wool employed instead of paper.

Curangine.—

This alkaloid, according to Boorsma, is possessed of marked febrifuge properties and derived from *Curanga amara,* a member of the family *Scrophulariacæ,* having the formula $C^{48}H^{17}O^{20}$. It is easily soluble in ethylic and methylic alcohols, aqueous acetone, and acetic ether; less so in ether, petroleum ether, carbon disulphide; and but partly soluble in chloroform and pure acettone. In water it is soluble to the extent of 6.18 per cent.

Important if True.—

The *Dominion Medical Monthly* declares that "Pressure over the supra-orbital foramen in alcoholic coma will cause a man to come to immediately," and that this method may be employed to differentiate between alcoholic coma, diabetic coma, hysterical coma and apoplexy.

We should like to have this statement more fully verified, especially as it is not an editorial utterance.

Will not some of our readers, when the opportunity offers, experiment and report?

Tuberculosis.—

An exchange declares that this disease is very common among pets—dogs, cats and parrots.

This is in a measure true, as parrots and monkeys are specially prone thereto, probably because they are kept in too confined space without a proper supply of fresh air.

The great trouble with pets is, that the average woman insists upon keeping them too warm, particularly if their natural habitat is the tropics or sub-tropics, under the supposition that equatorial regions yield a uniform heat. One of the most delicate of the Simian tribe, that escaped from its master, was known to have survived for several years in a mountain forest in northern Georgia, where ice in midwinter is no uncommon feature; and presumably it would have lived much longer but for the interference of the man with a gun.

Scanty Menstruation.—

Aside from the ordinary domestic remedies and the employment of apiol (true) and cannabis Indica, there is probably no agent superior to black cohosh, which should be administered in doses of fifteen to thirty minims at least four or six times daily. It is most effective with women living quiet sedentary lives, and that are closely approaching the menopause.

Use of Laryngoscope.—

Drop a minim of glycerin upon the mirror, warm slightly over an alcohol flame, then wipe off quickly. This will prevent the blurring of the image from condensation of respiratory vapors.

Heart Maladies.—

Potassium iodide is a valuable remedy where fatty degeneration exists as the result of debility or overwork; it is equally effective in both true and false angina.

But Most People Do.—

It is folly to expect the stomach to do the work of the teeth.

Items and News.

An Ascetic's Lament.—

Audi, doctor, me clamantem,
Trista voce lamentantem!
Aqua horrida interna
Ventris plena est caverna!
Diaphragma, in thoracem
Aquæ vi impressum, pacem
Rapit jam pulmoni, omnes
Fere noctes sunt insomnes,
Nunquam autem tulit venter
Meus aquam-phy! libenter!
Ergo doctor fac me salvum,
Aqua liberando alvum,
Ne sis Fabius Cuncator,
Veni Medicus Punctator.

—*Deutsche Medizinal Zeitung.*

The Tuberculin Cattle Test.—It has been declared that "if anything has been demonstrated to a mathematical certainty in experimental pathological medicine and anatomy, it is the fact that tuberculin is a sure test of masked or unrecognized tuberculosis in cattle."

This is the dogmatic, assertive side of the question. Practically, it is found the British Royal Commission on Tuberculosis, after a lengthy, careful and painstaking investigation, reported that the tuberculin test on cattle was untrustworthy.

There are some people in this world who would continue to assert that night was day if they stumbled at every step for want of light.—LAWRENCE.

The Practitioner and His Finances.—

The man who neglects to secure his financial position by careful investments, insurance, and prompt collection of bills, may arrive at the age when he ought to cease active practice, and yet be obliged to continue to make his daily living. Too often keen, able practitioners develop into querulous, jealous, disappointed old men, because they are obliged to compete with the younger men when they ought to have retired with honors.—*Medical News.*

The Photo-Bacterium.—

Pure cultures of the photo-bacterium—which is the cause of the phosphorescence of the sea,—can be obtained by placing a fresh haddock, or herring, in a two per cent. salt solution and keeping it at about seven degrees above freezing. In a few days the fish and all the fluid give off a pale greenish light, made more brilliant by adding a little sugar. The cultures can even be photographed by their own light.—*The Lancet* (London.)

Ozone, Uses of.—

This agent is coming into use for many purposes. While it artificially ages liquor, and spirits generally, it improves coffee, and is of advantage in the treatment of tobacco, of which it improves the aroma. It seasons wood for sounding-boards of musical instruments, and also has the effect of protecting it from the ravages of moisture and temperature. It is used for thickening oil in the manufacture of linoleum, and its action in bleaching linen is familiar to most of us.—*Western Druggist.*

The Country Physician.—

While there is much truth in the statement that, "Where there is nothing great to be done, a great man is impossible"—when it comes to medicine, to be a modest country doctor, surrounded by a confiding constituency, is no mean position to occupy, and might well fill the cup of ambition for the best equipped man.—*Clinical Review.*

Night Work.—

This is a much exaggerated evil of the physician's life. In the first few years of city practice there is not a superabundance of either day or night calls, and to one who falls asleep full of apprehensions as to the success of the future, the jingle of the telephone breaks in upon his troubled dreams like sweet music.—BENEDICT (*Lippincott's Magazine.*)

Practice of Medicine in Iowa.—

The State Board of Medical Examiners has refused to recognize diplomas from Barnes Medical College, of St. Louis, as entitling their holders to enter the examinations of Iowa.—*Northwestern Lancet.*

Pomegranate, New Alkaloid of.—

Piccinni has isolated from the bark of pomegranate root, a new alkaloid that is a liquid and likewise miscible with water.—*Chemische Centralblatte.*

Book Reviews.

King's American Dispensatory. Edited by Harvey Wickes Felter, M. D., and John Uri Lloyd, Phr. M., Ph. D.: Eighteenth Edition and third revision. Cloth, royal 8 vo.; pp. 2291; Two volumes. Price, $9.00. The Ohio Valley Co., Cincinnati.

This is, by long odds, the most complete epitome of materia medica and pharmacology ever issued from the press: Its scope is such as to dwarf all other dispensatories, and the information conveyed (notably), has been edited with a care that seldom accrues to any work of this class. It practically puts to shame the National and the United States Dispensatories with which, revision, for years, has meant little but the embodying of a few new preparations, often of no merit.

The original King's Dispensatory was narrow, empirical, and uncertain in scope and adjuncts, and morever strongly tinctured with the tenets of Thomsonianism and the so-called "botanical practice;" and this has obtained in some degree to all subsequent editions up to the one now under consideration—"Eclectic" in name, for the first time only has this work reached the high plane indicated by its title.

The new volumes are broad, scientific, and in every way reliable. Professor Felter is well known as an authority on therapeutics, especially the branch that more particularly comes within the scope of his school, and that he has not slighted his subjects the text bears ample evidence. Professor Lloyd, too, stands in the front rank of American chemists, botanists and pharmacologists, and moreover has justly earned a reputation for scientific ability and exactitude such as accrues to but few. Hence these volumes represent the acme of pharmaceutical, botanical, chemical and therapeutic accuracy and advancement.

The work as a whole is a worthy one, and no professional man who has accurate therapeutics at heart can afford to be without it.

Professor Lloyd makes the explanation that in 1880 he promised Doctor King to revise the pharmaceutical and chemical sections of the American Dispensatory if such became necessary; that he did not understand the magnitude of the undertaking which constituted practical rewriting. He adds that monetary considerations could not have induced him to undertake this enterprise and, that the exacting researches necessary have been altogether a work of love.

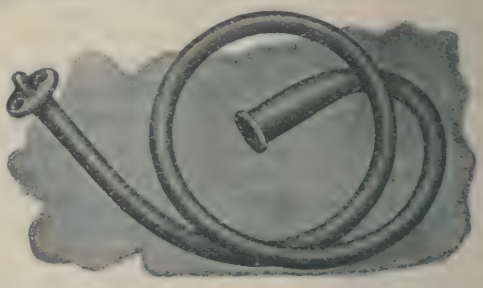
We have only one adverse criticism, namely: A number of drug preparations are spoken of as "specific;" this word is nowhere explained and apparently finds place solely with the view of advertising the preparations of one house, and the work thus, practically, becomes an adjunct of an individual Eclectic school; we understand these "specific" drugs to be of the same precise standard as Pharmacopœal fluid extracts except, perhaps, that in some special instances they are derived from the green, crude product.

This fact, however, does not in any sense militate against the actual value of the work, as before mentioned, though it certainly is the reverse of good taste.

New Instruments and Devices.

COMBINATION SELF-RETAINING CATHETER AND DRAINAGE TUBE.

This illustrates an instrument that, though not entirely new, is a modification of an existing form that cannot fail to secure the full appreciation of the medical fraternity.



It is a thin, flexible velvet-finished rubber catheter, with an elastic button at the end so that it may be drawn over a stylet for the purpose of facilitating introduction into the bladder. The button or bulging portion enables it, likewise, to be employed with certainty as a self-retaining catheter for either sex. It is also uqually useful as a drainage tube, not alone for the bladder but for the chest cavity after the operation for pyo- or hydrothorax,—it is valuable in any cavity where compression is not so great as to interfere with its lumen.

The value of this device can hardly be overrated in cases of cystitis and urethritis with enlarged prostate, or where, through sensitiveness, constant catheterization becomes unbearable and the employment of cocaine (as it almost always is in the urethra) a menace.

This is a soft rubber catheter made in two parts; or in other words is composed of two distinct tubes joined together in such a way that introduction is not only simple but facilitated.

The advantages of the design are, it is thoroughly aseptic and furnishes a large and continuous lumen for the efferent tube carrying off the urine.—This is especially valuable when the urine is very dense or heavily laden with pus.

It is also available for irrigating the bladder in cystitis with solution of potassium permanganate, as recommended by Doctor Valentine of New York.

Therapeutic Brevities.

Indication for Venesection.—Bleeding may be employed to good advantage in:

Diseases of the nervous system, meningeal inflammations, cerebral congestion, and apoplexy:

Diseases of the kidneys, where there is generalized œdema with uræmic symptoms—here venesection acts both as a depleting process and as a sudorific:

In circulatory troubles consecutive to cardiopathies,—it unloads the venous system and augments arterial tension:

In pneumonia its efficacy is remarkable and recourse should be had thereto at the outset; it eases the patient by suppressing pain in the side and rendering the respiration and circulation freer; likewise diminishes the engorgement and pneumonic exudate.—If the heart should ultimately flag, there need be no hesitation in repeating the operation.

In chlorosis:—One or more bleedings at from four to five weeks' interval constitute a sovereign remedy, and the more the blood is altered, the more the operation is indicated.—Note: A simple method, little known, of appreciating the alteration of the blood without the hæmatoscope and the hæmatometer is, collect a few cubic-centimetres of blood in a straight tube and allow to remain for twenty-four hours; two-thirds should then be occupied by the clot, above which should be seen a fine red layer composed of leucocytes, while the upper third is occupied by serum of a straw-yellow color; the more the appearance differs from this, the more the blood is altered, and the more is bleeding indicated.—KACZER (*Wiener Klinische Rundschau.*)

Glaucoma.—This condition is frequently relieved by improved nutrition, with correction of any existing errors of refraction; also, sometimes, by iodide potassium, associated with the topical employment of eserine drops.

Mild and insidious cases of inflammatory character, between paroxysms, may exhibit but little tension; such require iridectomy for the drainage of the engorged vessels during the paroxysm, and constitutional treatment to aid in the elimination of accumulated debris in the tissues.

Inflammatory glaucoma, excluding traumatic cases, should be accepted as a manifestation of many diatheses; and while iridectomy may be necessary, it should not be performed to the exclusion of the all-important constitutional measures. Moreover as the operation can accomplish nothing beyond the establishment of drainage of the vessels of the iris and contiguous structures into the aqueous chamber, the amount of iris removed should be small. The operation should not be repeated, and in any case is only supplemental to constitutional measures.

In all cases of increased tension of the eye, with peripheral contraction of the field and engorgement of the retinal veins with or without cupping of the disc, constitutional treatment is essential; and, above all, strict attention to general nutrition and habits of life.—REYNOLDS (*Ophthalmic Record.*)

Dysentery.—This is an acute infectious disease, and like most of its class has a tendency to get well in time; still is of sufficiently serious nature to demand treatment. It is hardly necessary to review the many drugs which have been recommended; the majority are useless, in many cases pernicious. Large doses of ipecac were very popular at one time, and, doubtless, efficacious in many instances.

The cause must first of all be eliminated: Next disinfect the mucous membrane and restore the normal glandular secretion, which is best done by administering magnesium sulphate in drachm doses, every three hours, combined with ten drops of dilute or aromatic sulphuric acid. The beneficial effect is shown in a few hours: The pain becomes less; the tormina and tenesmus rapidly subside; the pulse rate diminishes, and the temperature is lowered. When these effects are apparent, the Epsom salt may be gradually withdrawn.—CRUIKSHANK (*New York Medical Journal.*)

Uterine Deviations.—The use of glycerin and ichthyol tampons in the treatment of retro-displacements, and particularly in those complicated with the perimetric inflammation, where it can be persistently and thoroughly carried out, is of great value. Glycerin, by its affinity for water, depletes the tissue; ichthyol, five or ten per

cent. (in glycerin) will alleviate pain and hasten absorption. Replace the uterus and introduce one tampon into the posterior vaginal fornix, packing quite firmly;—this will press the uterus anteriorly; then introduce another (larger,) straight into the vagina against the anterior lip of the cervix, to hold the first in place, and to raise the uterus, thereby increasing the ante-position and also improving the circulation by straightening the pampiniform plexus of veins. Finally, in treatment of uncomplicated retro-deviation by a simple operation, advance the anterior vaginal wall higher upon the uterus.—SHIMONEK (*Milwaukee Medical Journal.*)

Laryngeal Tuberculosis.—Congestion of one vocal cord is very suspicious of tuberculosis, and a week's treatment by potassium iodide will exclude syphilis.

The prognosis is not so grave as was formerly supposed; the laryngeal process may heal even with progressing pulmonary tuberculosis. No sharp, irritating foods or drinks should be allowed, and the patient should be forbidden to use the voice, even in a whisper, communicating entirely in writing until cicatrization has progressed for a few weeks or months. When it is found that the parts do not become congested or swollen from whispering, then the use of the voice can be gradually resumed. Treatment may be by means of solution of lactic acid, not oftener than every one or two weeks. If possible remove all the diseased tissue by an endo-laryngeal operation. In advanced cases with much stenosis, tracheotomy is preferable to laryngo-fissure. —SCHMIDT (*Thérapie der Gegenwart,* Berlin.)

Giaourdi.—Boil milk for one hour, constantly stirring. When it has reached the desired consistence, add a fig ferment and reduce the temperature to 113° Farh. The result is a smooth, semi-solid, easily digestible milk-food, which while not materially different from "bonny-clabber," possesses many advantages over the latter—the fig ferment produces a soft, smooth coagulum that is the more digestible because of the lack of lactic acid. This preparation has proved very satisfactory in gastric ulcer, pyloric stenosis and neurasthenia.

The ferment may be made by soaking a dry fig over night in three ounces of water, next morning adding a trace of rennet along with a few drops of lemon juice. Many Swiss cheese-makers employ the fig ferment as an addition to rennet, since thereby a much finer flavored and more homogeneous product is obtained.

Giaourdi is in general used in Greece and the Levant.—ACHILLES ROSE.

Gleet and Gonorrhœa.—Triturate five drachms of acetanilid and 120 grains golden seal with three ounces of glycerin and water sufficient to bring the finished product up to one pint. This should be employed as an injection, after shaking well, at least three times daily, following immediately upon micturition, the fluid being retained in the urethra for at least four or five minutes. Under ordinary conditions a cure may be expected in from fourteen to ninety days.

If the patient is emaciated, the bowels should have due attention; also a tonic may be administered, something of the character of the following:

Strychinine sulph...	2 grains
Hydrastis, powd....	3 drachms
Glycerin	3 ounces
Ginger, ext. fld.....	3 ounces
Alcohol	5 ounces
Water to make....	16 ounces

A teaspoonful every three hours or as demanded.

—WASHBURN.

Bees for Rheumatism.—Some years ago an Austrian physician advanced the theory that the virus of the bee sting is an infallible remedy for acute rheumatism, a fact that receives unquestionable confirmation from a custom of the country people in Malta. Bees are plenty in this island, and their stings in such repute that resort to this primitive method of inoculation has been a common practice, in severe cases of rheumatism, for generations, with most satisfactory results.—*Mediterranean Naturalist.*

Hydrogen Peroxide.—The activity of this chemical is promoted, when employed externally or internally, by the addition of hot water. A teaspoonful added to a half glass of the latter and ingested just prior to meals, exerts a powerful remedial influence upon catarrhal gastritis.—ELLINGWOOD.

Chorea Complicating Pregnancy.— Chorea is not an accidental complication due to the occurrence of a previous infantile chorea, but in the majority of cases appears for the first time, and to a great extent is induced by this condition, although pregnancy alone can not be regarded as the direct cause; various conditions such as heredity, previous infective diseases, etc., are predisposing factors, and some nervous shock is usually the starting point.

The prognosis is more grave than in early life. In severe cases ether and chloroform may be given, as in eclampsia: Pinard suggests producing almost continual sleep (waking the patient only to administer food), by means of chloral hydrate; when improvement appears, the doses can be diminished, but should be continued until this desideratum obtains. —Newell (*Medical and Surgical Journal,* Boston.)

Indolent and Stubborn Ulcerations.— After an ulceration has partially healed, it is often found, when a certain stage is reached, that it no longer improves. One of the best applications for this condition of affairs is oxyde of zinc ointment every ounce of which is fortified with ten grains chloral hydrate—the chloral seems to stimulate and promote the granulating process.—*Medical Summary.*

[In many instances the delay in healing is due to the tension of the parts. Here strapping with adhesive strips, in a way to secure relaxation of the tissues in the immediate neighborhood of the ulceration, secure results that are almost magical.—Ed.]

Asthma.— This condition, regardless of cause, may sometimes be relieved by applying a bag of ice to the neck over the pneumogastric.—Sanger.

[It might be well to try also the application of cantharidal collodion in the same locality.—Ed.]

Trachoma.— Excision of the retrotarsal fold is the best method of treatment, an operation that always proves successful and can be performed without difficulty.—Kan (*Vratch.*)

Uterus, Influence of on Bladder.— In view of the intimate vascular and nervous, as well as mechanical and topographical, relations of the uterus to the bladder, it is advised that in all cases of vesical trouble in women, the uterus should first be examined, and existing lesions corrected. Relief of the bladder symptoms may be obtained in this way by curettage, uterine dressings, or pessaries, or at the time of menstruation by relieving pelvic congestion by diuretics, laxatives, hot baths, or even local bleeding. —Vergely (*Medical and Surgical Monitor.*)

Sodium Chloride, Lack of in the Economy.— When the system is deprived of its normal supply of salt the nervous tissue becomes more susceptible to medicinal salts, in consequence of which extremely small doses becomes effective. In this manner, for instance, thirty grains of sodium bromide given during twenty-four hours proves remarkably helpful in severe cases of epilepsy. Probably this is also true of the alkaloidal salts.—Richet (*L' Union Médicale.*)

Urinous Odor, Correction of.— Essence of turpentine taken internally in ten-drop doses, three times daily, by persons afflicted with urinary incontinence, in a short time does away with the disagreeable ammoniacal odor, replacing it with the flavor of violets. This treatment can be continued without inconvenience for several weeks, and is only contra-indicated in gastric catarrh and nephritis.—*Kansas Medical Journal.*

Influenza of Childhood.—

Sodium benzoate.	30 grains
Phenazone	30 grains
Sparteine sulph..	2 grains
Paregoric	4 drachms
Liquorice extract	1 drachm
Tolu syrup to make	2 ounces

Shake well: A teaspoonful four times daily for a child of six to eight years of age.

—*Merck's Archives.*

Furuncles.— Salicylic acid in the form of ointment or paste, constantly applied, will relieve the pain and tumefaction. Early resort thereto will usually secure abortion of the initial purulent accumulation; applied later, it will at least hasten and promote resolution.—Hartzmann.

Cocaine Muriate.—In small doses this drug slows the pulse rate, but this effect persists only for a brief period; is in fact ephemeral. Larger quantities, as might be expected, intensify this action, and if the toxic effect is produced, arrest of the heart in diastole results; trigeminal paralysis is also induced. The slowing of the pulse depends on irritation of the vagi, since it can be inhibited by the simultaneous employment of atropine.

Large doses induce speedy paralysis of the cardiac ganglia, preceded by elevation of blood-pressure, induced by the stimulation of the vaso-motor centres as well as by a direct action upon the organ itself.—WASSERZUG.

Pilocarpine in Eye Maladies.—Gratifying results are obtained in the treatment of interstitial keratitis, traumatic purulent-iritis, vitreous opacities, and retino-choroiditis. Some place great reliance upon the drug in toxic insanity supervening upon influenza, auto-intoxication, and similar processes, the brain rapidly clearing after two or three free perspirations. Apart from its action hypodermatically, pilocarpine (or the fluid extract of jaborandi) in small doses by the mouth, has been found of value in degeneration of the vitreous. The persistent nausea so common after the use of the drug is usually relieved by small doses of chlorodyne.—HANSELL (*Philadelphia Medical Journal.*)

Rectal Prolapse in Children.—A tapering piece of ice, about three inches long and one inch in diameter (at the largest end), is wrapped with iodoform gauze, and its point pressed gently against the center of the prolapsed mass until it is replaced; the ice tampon remains in the rectum without the use of any retentive bandage, provided it is pushed in far enough. A fresh piece of ice is employed in this way after each act of defæcation. This treatment soon cures the prolapse, and seems to act by emptying the blood-vessels and hightening the contractility of the rectum.—HAJECH (*Deutsche Aërtze-Zeitung.*)

Varicose Veins.—Inject Squibb's ergot by the side of the vessels, then give by the mouth one-eighth to one-half of a grain of barium chloride to contract the arterioles.—BARTHOLOW.

Dropsy.—*Apocynum Cannabinum* is an old remedy possessed of immense value, and when given for certain direct indications proves unfailing. Œdema of superficial cellular tissue, wherever found and however extensive, is a condition in which it will not fail.

Personal observation proves it to be a heart tonic of considerable value where there is flaccidity of cardiac muscle coupled with an atonic and relaxed condition of the general system; with a tendency to adiposity and plethora, especially when effusion appears, it will produce excellent results in small doses, say from one to three drops. In others, particularly if relief from the dropsical effusion is imperative, large and hydragogue doses may be given.—ELLINGWOOD.

Constipation in the Young.—Constipation is invariably due to errors in diet, either through the mother's milk or from improper artificial food. Massage the abdomen gently with inunctions of cod-liver or of castor oil. Study the diet and regulate it according to the modified teachings of Rotch. Use glycerin injections or suppositories, as necessary. In older children, feed prune juice, stewed dried peaches, dates, orange juice, and other laxative foods, and practice the same massage and inunctions. Give less drugs and practice more mechanical and dietetic hygiene, and you will have more satisfaction.—*Medical Summary.*

Hay Fever.—Where no hypertrophy or permanent obstruction is present, but simply a turgescence of the mucous membrane, use the following:

Arsenous acid.....	1 grain
Strychnine sulph....	2 to 3 grains
Belladonna, ext.....	4 grains
Zinc phosphide.....	4 grains
Gentian, ext.....	20 grains

Make twenty pills and give one three times daily.

In conjunction employ a menthol preparation locally. This is effective in any form of nasal neurosis.—DABNEY (*Northwestern Lancet.*)

New Use for Black Cohosh.—In painful conditions existing in or around the eye or ear, the external application of the cimicifuga tincture will often give immediate relief.—*Homœopathic Recorder.*

Gymnemic Acid.—This is the active principle of *Gymnema sylvestris,* and is a greenish-white powder with pungent, sour taste, only slightly soluble in water. If a small quantity of the tincture, made by dissolving the drug in alcohol, be placed upon the tongue, the taste of sweet things and of bitter things is entirely destroyed; no other effect is produced, for taste is as sensitive as ever to other substances. If the mouth is rinsed with a twelve per cent. solution of the acid before taking any bitter substance, the latter will not be tasted.—*Chicago Medical Times.*

Solidago Virgaurea.—This is a foreign species of golden rod, one used as a domestic remedy, for backache and diseases of the kidneys generally, in Germany, for centuries. Homœopathic physicians prescribe for renal pain, or pain in circumscribed spots in the region of the kidneys; for pains in back, extending forward to the abdomen; in dysuria, difficult and scanty urination, dark urine with sediment (either of the phosphates or blood or pus); useful also in pronounced nephritis.—RADEMACHER.

Ergot and Uterine Inertia.—An excellent way to give the medicament is, to dilute a teaspoonful of the fluid extract in fifteen teaspoonfulls of water, in a glass, and give a drachm every ten minutes until improvement occurs. The treatment should be begun early to secure the best results; and even then the remedy is inferior to cannabis Indica, providing a reliable preparation of the latter can be obtained.—*Medical Review* (Birmingham).

Bilious Colic.—*Dioscorea villosa* is undoubtedly as much a specific in bilious colic as is quinine in intermittent fevers. The dose of fluid extract is from five to thirty minims—which may be doubled in emergency; of the solid extract, one to four grains every one to four hours, according to urgency. The remedy is useful in flatulence of the bowels.—BACON.

Uterine Fluxes.—Hydrastine is the most valuable of all remedies. Use hypodermatic injections of five to ten drops of the hydrochlorate in ten per cent. solution. There is no pain or discomfort from the operation.—FALK.

Tonic, a Valuable.—Phosphate of soda combined with ergot affords favorable results in melancholia, hysteria, adynamia, and chlorosis; it overcomes the great constitutional depression of the algid stage of certain fevers. Sodium phosphate alone has been employed in the cerebral torpor of senility, but the combination with ergot increases its efficacy. The general indication for the administration of the mixture is functional debility of nervous origin.—LUTON (*Journal de Médicine de Paris.*)

Hæmorrhoids.—More than once I have found great relief or temporary cure to speedily follow upon the free use of distilled extract of hamamelis as a rectal injection. The quantity used is from two to four drachms, frequently, during the day and evening. No unpleasant results accrue. It may be that those who have been disappointed trusted to internal administration or too scanty local application of the drug.—DE WATERVILLE.

Warts and Moles.—Twice daily touch each with enough glacial acetic acid to saturate without allowing to touch the healthy skin. If this results in soreness, too much acid has been employed; suspend for forty-eight hours, and again resume. The warts and moles turn brown, rapidly disappear and leave no scar. There is no danger. Do not tell the patient what is being used, though it may safely be placed in his or her hands, with cautions.—TAYLOR.

Cranberries.—The pure, fresh juice of raw cranberries, given freely, either undiluted or with an equal part of water, is an excellent means of relieving the thirst in fever and moreover is markedly antipyretic. In the thirst and vomiting peculiar to cholera it is even more effective. In fifty cases in which ice and narcotics failed to make the slightest impression, cranberry-juice, in small but repeated doses, rapidly checked both vomiting and nausea.—GORIANSKY.

Nasal Catarrh.—Most ozænas and catarrhal discharges are readily relieved by the exhibition of berberis. If the Highmorean antrum is implicated, relief is prompt if the remedy is administered in full doses.—HEITZMAN.

Nitrous Oxyde and Ether.—The advantages of the combined method of using nitrous oxyde with the Bennett inhaler, followed by ether, have been shown it in all cases operated on during the last eight months in Doctor Kelly's private hospital. It seems to possess so many advantages to the patient, operator and anæsthetizer, and so few disadvantages, that it has become a distinct part of the operative *technique*.—*Philadelphia Medical Journal.*

Iodoform in Lupus.—Excellent results can be obtained by the hypodermatic injection, at a distance from the seat of disease, of iodoform dissolved in a neutral petroleum. Improvement generally appears after twenty-four or forty-eight hours, and is well marked at the expiration of five or six days.—LAVALIER (*Journal des Maladies Cutanées et Syphilitiques.*)

Heart Maladies and Alkaloids.—The best authorities are united in discouraging the use of the active principles of digitalis, strophanthus and convallaria, in the treatment of cardiac disease. The best effects are obtained by employing the tinctures, preferably the "mother tinctures" so-called, of the Homœopath.—*Medical Gazette* (Bombay).

Influenza.—Infusion of boneset is one of the best remedies for the treatment of *la grippe*, inasmuch as it reduces temperperature, acts as a sedative and alterative, and appears to be grateful to the patients. —BRODNAX.

[The foregoing has our hearty endorsement.—ED.]

Stomach Anodynes.—Atropine checks the gastric juice almost completely, but morphine increases it. When secretion is excessive, as in ulcer, morphine is contraindicated, and one of the belladonna preparations will act better.—BIEGEL (*Thêrapie der Gegenwart.*)

Cystitis, Chronic.—Rhus aromatica, ammonium muriate, potassium citrate, combined, do well, but the dose of the ammonium salt must be large to be of real or lasting benefit.

I always advise the urine be rendered alkaline by some potassium salt combined with a vegetable acid.—JOSEPH ADOLPHUS.

Scarlatina.—Few cases of scarlet fever are not benefited by the constant, almost continuous, exhibition of small doses of tincture of aconite and belladonna—say one-fourth or one-half minim of the former, and one-sixth minim of the latter. Potassium bichromate is very satisfactory for the angina, and daily inunction by means of cacao butter should not be neglected—this latter affords nourishment, favors desquamation, and reduces the fever.—STOCKWELL.

Hydrastis.—This is a very good remedy in constipation. Hughes, in his "Pharmacodynamics," recommends a drop of the mother tincture in water before breakfast. A globule of the first attenuation, once or twice daily, has been given by me on many occasions and I can recall no failure.—CHOUDBURY.

"Bone" Felons.—To abort before suppuration has set in, cover the swelling to the thickness of an eighth of an inch, with citrine ointment. This must be kept in place by a non-absorbent bandage, and put on fresh every eight hours, until all signs of inflammation have disappeared. — LUMMINS (*Medical Summary.*)

Gonorrhœal Buboes.—Apply, thrice daily, with friction, one part each of oil of sassafras and oil of peppermint, dissolved in sixteen parts strong tincture of capsicum.—WASHBURN.

Albuminuria.—Try one drop of a one per cent. solution of nitro-glycerin, three times daily. This often will relieve the patient in a few days.—*Northwestern Lancet.*

Mosquito Bites.—Naphthalan is an effective remedy for mosquito bites. Its action on the poison is effective and specific. —VOGES.

Uterine Inertia.—Strong hot coffee, drunk without seasoning, will usually prove effective.—JOSEPH ADOLPHUS.

Diphtheria.—Local treatment is cruel and brutal whenever and wherever applied. —JACOBI.

Medical Progress.

Disease Odors.—

Of the specific odors of disease two very marked cases come to mind: One, a young, buxom, red-cheeked woman, whose menstrual discharge was accompanied by such a pervasive odor that few could stay in the same room with her; the other, a man who suffered from profuse fœtid perspiration confined to the axillary regions—the fluid could be seen constantly exuding, of a consistence a little heavier than normal perspiration, the disagreeable odor it yielded being very penetrating, so much so as to pervade the whole room and adhere to the furniture for hours after his departure.

The ammoniacal smell common to the aged, and due to retained or dribbling urine is well known. Berard says that, apart from the excretions, an abnormal odor of the skin tends to draw flies, and that however little noticeable it may be it denotes death is near; and Boërhaäve held that a cadaveric odor always presages death.—Althaus tells us that Skoda was hardly ever led into error by this indication,* and Compton also laid great stress upon this as a clinical symptom; but the smell given off during the "death-agony" is totally different from the death odor (that of putridity) and is universally admitted to be specific.

The odors obtaining to sex are vastly different, thus in man it suggests mushrooms, in woman codfish.†

In gout the skin secretions take a special odor which Sydenham compared to whey; it is sour, or at least sourish, as there is an excess of ammonia. In rheumatism it is acetoformic, particularly in the regions of engorged articulations (Monin); it is a sour-smelling, acid perspiration.

In diabetes the smell is sweetish and mawkish, as of hay, according to Latham, "acetone" says Picot, and "midway between aldehyde and acetone, being due to a mixture in variable proportions of the two bodies," according to Bouchardat.

A musky odor obtains to several maladies, notably peritonitis, jaundice and icterus; and a stale, sour-beer odor to scrofulosis.

The pyæmic person has a sweet, nauseating breath, with perhaps a flavor of new-mown hay.

In milk fever the smell is distinctly acid; in typhoid, musty, often with the odor of blood; in typhus, ammoniacal and mouse-like, which latter also obtains to favus; in intermittent the odor is that of fresh-baked brown bread; yellow fever has a cadaveric smell, or like the washings of a dirty gun-barrel.

In measles it closely resembles fresh-picked feathers; in diphtheria, is sickening and gangrenous—an odor that is absolutely pathognomonic; in smallpox, according to severity and stage, it ranges from that of the fallow deer to the dreadful one of the whole menagerie, or it may be that of burning horn or bones.

Hysteria usually develops an odor of violets or pine-apples; sudamina, that of putrid straw; scabies, mouldy; anæmia and cholera, ammoniacal (Drasch, Parker) and the discharges have either a semen or mushroom flavor.

Otorrhœa has a peculiar, clinging, long-lasting odor that once observed will never be forgotten; so, too, is the odor of a hen-roost that obtains to ozænas and bad chronic catarrhs. Gangrene has an old, dead-meat smell, as have some cancers at certain stages, —if there is much pus from an actively breaking-down, malignant growth, and especially in sarcomas, it is more like decaying fish.

At the onset of the plague the odor is sweet (Diemerboëck) or honey-like according to Doppner.

The atmosphere surrounding the chronic onanist will have a rotten mushroom-like odor, and an ill-kept libertine will combine this with a cod-fish smell.—Clarke (*Homœopathic Medical Recorder.*)

*[An odor of semen persisting about the body and apartment of an old man, even if he does not appear seriously ill, appears to be indicative of speedy dissolution. This is invariable, though why, except it is in a sense cadaveric, we are unable to explain. It most frequently obtains in connection with suppression of urine, and in the majority of cases points to prostatic disease of long standing.—Ed.]

†[The odor of a perfectly healthy, cleanly woman should be that of thyme; the codfish odor is evidence of lack of personal cleanliness as regards the sexual organs, or of a diseased condition.—Ed.]

Value of Meat Extracts.—

Doctor A. McGill, in a report to the Inland Revenue Department, Ottawa, Canada, observes that much has to be done by experimental physiologists before final

pronouncements can be made upon the food value (if any) of the flesh bases, which, in most instances, form the chief portion of the nitrogenous material in meat extracts. The bases certainly differ among themselves in food value, and, of course, if this is true of the flesh bases, it is, *a fortiori,* true of the various forms in which proteid matter occurs in these preparations, viz., as peptones, proteoses, acid albumens and so forth. Doctor McGill's experiments suggest that a part of the nitrogen in some meat preparations exists as urea. Urea certainly can have no food value, nor can one really understand how the allegation that it is of use as a stimulant can be justified. Nature seems to have provided for its prompt elimination from the system, and it is certain that any failure to get rid of it by way of the kidneys results in serious disturbance of the vital functions, and may end in death by uræmia. No practical method has been discovered by which a sharp analytical line can be drawn between the nitrogen present as urea and that present as creatin, creatinin and xanthin. It is evident that the flesh bases cannot be called food stuff in the proper sense of that term. They represent a stage of the process by which complex nitrogen compounds are changed to simple ones, supplying the energy so set free to the animal organism in the form of vital force. They may still have some food value, since they are not excreted as such, but undergo further simplification, till they appear as urea. It is certain that their food value is very much less than that of proteids proper. When once the urea stage is reached, the urea must be promptly got rid of. The blood is the vehicle by which nutritive matter that has been digested and made soluble is conveyed to all parts of the body; and it is also the vehicle by which waste matter is conveyed to the lungs and other excretory organs to be eliminated. Flesh bases are always present in the blood, though in small amounts. They are much more largely present in muscle tissue, and when fresh lean beef is treated with hot water, these flesh bases are the chief material taken into solution. Apart from any possible nutritive value which they have, these flesh bases undoubtedly possess a stimulant action on the system analogous to that exhibited by the alkaloids of tea, coffee and cocoa, and it is beyond question that to this stimulating effect, rather than to any true nutritive power, they owe such value as they possess.—*British Food Journal.*

Bacteria a Vital Necessity.—

The presence of certain bacteria in the air is as necessary as oxygen for the continuance of vital processes in animals. When animals are confined for some days in a chamber of sterilized air, some die, and those taken out alive expire shortly afterwards or, if they survive, show symptoms of extreme lassitude and weakness. These results are due neither to starvation, nor to toxic exhalations, nor to the presence of CO^2 in the sterilized air. The urine excreted by the subjects is found to be abnormally rich in leucomaines, while the quantity of urea present is very low, showing that the processes of oxydation, which normally go on in the tissues, were materially retarded. The oxydizing ferments which have been shown to be normally present in the tissues are supplied by bacteria, which gain access to the blood and, probably, to the leucocytes in the lungs. The actual cause of the debility and death in the animals experimented on may be considered to be the enormous accumulation of insufficiently oxydized products which exercise a toxic influence. Bacteria are, therefore, considered to be essential to the maintenance of animal life.—KIJNIZIN (*Pharmaceutical Journal and Transactions.*)

The Earliest Human Ovum.—

Leopold recently exhibited microscopic sections of the youngest human ovum ever detected. The uterus of a woman, aged thirty, was removed for cancer of the cervix, the interior carefully examined, and an undoubted ovum the size of a lentil found making a prominence on the surface of the uterine mucous membrane, which was hypertrophied in its neighborhood. The periphery of the ovum was bounded by a deep groove devoid of mucous membrane. After careful inquiries it was concluded that the ovum had reached the eighth day after conception. Great pains was taken to secure successful sections. The arrangement of the villi, and the opening of the arterioles of the endometrium into the intervillous spaces, came out very clearly.

Kanthack has recently added to the

museum of St. Bartholomew's an instructive specimen of a very early human ovum in its membranes.

Histological study of the human embryo and its envelopes during the first few weeks of development is much needed. We must not rely too far on homologous structures in the lower mammals, where the anatomy and physiology of the genital tract differ in important details.—*British Medical Journal.*

Voluminous Retro-Pharyngeal Abscess.—

A boy of eleven months began to suffer from cervical adenitis with suppurating glands, and incision liberated a large quantity of pus. Later it was noticed the child had trouble in swallowing, which steadily increased until brought for examination. A visible bulging of the posterior pharyngeal wall was discovered, almost touching the base of the tongue and filling the bucco-pharyngeal cavity, causing difficulty in swallowing and respiration. This was a voluminous retro-pharyngeal abscess consecutive upon suppurating cervical glands, which was immediately incised, the child being held on the knees of an assistant, and immediately bent forward. Notwithstanding these precautions, the pus was so considerable that it caused asphyxia. The pharynx and larynx were well mopped out, and the child being laid flat on a table, rhythmical tractions of the tongue and artificial respiration were practiced, along with flagellation of the cardiac region. In fifteen minutes respiratory movements began. Complete recovery in six days.—Traver (*Revue Hebdomedaire de Laryngologie.*)

The Twentieth Century Baby.—

The baby of to-day, as a matter of sober fact, is threatened with manifold drawbacks to development short of actual extinction, by the wholesale substitution of the artificial for the natural. Instead of the most perfect food in Nature, mother's milk, we find a host of artificial substitutes, each one of them, calculated to rear an infant with the brains of a Newton combined with the frame of a Sampson. How often, alas! the outcome of all these costly cares is a being of stinted body and limited intellect, unfitted to play a soldier's part in the battle of life. This question of food strikes deep into the physical welfare of a race, and there can hardly be a more serious National problem than how to rear this Twentieth Century baby of ours in strength and happiness. There is a vast deal of nonsense written and taught about the proper way to clothe, nurture, and tend babies generally. The best basis is that of plain milk diet, either from the breast or from modified cow's milk: For the rest, those ills that are preventable should be prevented. Most of the mischief done in the nursery is the result of *attempting to do too much!* It would be an important step toward the stability and future of our race were the laws of health to be taught in our schools, with a special class on nursery management for the girls' classes.—*Medical Press and Circular.*

Urine, Oxalates In.—

Calcic or calcium oxalate is rather a common sediment, often mistaken microscopically for a cloud of mucus; it is found in both acid and alkaline urine, especially after the patient has eaten freely of rhubarb, tomatoes and other vegetables rich in oxalic acid. The crystals are usually octahedral in shape, giving the appearance of a square crossed by two diagonal bright lines, like the back of a square envelope; they are much smaller than those of the triple phosphate, from which they are further distinguished by their insolubility in acetic acid. A much more rare form of calcium-oxalate crystal is that resembling a dumb-bell.

Hippuric acid is occasionally met with as a urinary sediment, in the form, microscopically, of fine needles or of four-sided rhombic prisms with beveled ends and edges. A deposit of hippuric acid is met with most frequently after the ingestion of benzoic acid or of certain aromatic vegetables—cranberries, for instance.—Hill.

Differential Diagnosis.—

Acute general miliary tuberculosis and basilar cerebro-meningitis at times simulate typhoid. In the former, attention and minute examination of the patient, and the course of the morbid phenomena, quickly dissipate any doubts; in the second, the previous history of the disease, the mode in which it commenced, the course of the temperature, the absence of abdominal symptoms, and the early appearance of delirium or coma, do not long allow hesitation in the diagnosis.—Homem.

Fresh Air for Infants.—

The most salient point made by Doctor Holt in his able address before the Cleveland Medical Society, recently, was the importance of fresh air for infants. It is a striking fact that this one thing makes not only a perceptible but an enormous difference in the mortality statistics of hospitals. Of the essentials, good food, and fresh air, the latter is by no means the least important, and the lack of this often determines the death-rate of seventy-five to ninety-five per cent. in foundling asylums. It is not reassuring to note the fact that the wealthiest as well as the most intelligent people are taking the greatest pains to exclude fresh air from their houses. The modern house is furnished with weather-strips to prevent draughts, and with either steam or hot-water heaters which provide no ventilation at all, or a furnace with an air-shaft that draws its supply from the hall, thus preventing an influx of pure air from without,—all of which is well calculated to conduce to infant mortality.—*Cleveland Medical Journal.*

Alopecia.—

The most unpleasant and unsightly cases are the atrophic forms, in which coarse thick hairs are found on a dry scalp without baldness—cases that are practically hopeless. Nor is there much hope where young men become prematurely bald at the same age as when this condition overtook their fathers,—which would seem to indicate that the malady is of an inherited rather than an infectious nature, though it rarely attacks girls. Perhaps the reason why the female sex suffer less from alopecia is the fact they give more attention to their hair, and wear more suitable and better ventilated headgear.—*La Semaine Médicale.*

Typho-Malarial Fever.—

In spite of "eminent" authority to the contrary, this term is the proper designation for those asthenic forms of remittent fever with typhoid symptoms in which the typhoid bacillus is not present in the blood. It is a typhoid fever complicated by pre-existing malarial infection or a malarial fever complicated by a typhoid.—LILLIE.

Pneumonia.—The appearance of labial herpes is a favorable sign in congestion of the lungs.—*Denver Medical Times.*

Gelatine Suppositories, Base for.—

Gelatine forty parts; glycerin, twenty-five parts; water to make 100 parts, or, if a softer mass is required, 120 to 130 parts. The product is said to be well adapted for use with alum and other salts. The addition of twenty-five parts of powdered acacia or dextrin in place of an equivalent amount of water renders the mass more suitable for use in summer or in a warm or moist atmosphere. In either case the gelatine should be soaked in 200 parts of water until soft, the glycerin (and gum if required) added, and the whole heated on a water bath until complete solution is effected and the excess of water evaporated. Stir gently while heating, and keep the temperature well below boiling-point. If air-holes appear in the mass on cooling, it must be reheated with 100 parts of water and the whole again evaporated to the required bulk. The moulds should be oiled before filling, and if made of metal, should previously be heated to about 122° Fahr.—*The Chemist and Druggist.*

Foreign Body in Maxillary Sinus.—

Mignon, of Nice, reports an interesting case in which a young man, with suicidal intent, discharged a revolver against his temple. A few days after the incident, as no symptoms of reaction occurred, an examination by the radioscope was attempted, and it was found that the bullet was lying loose within the left maxillary sinus.—*Archives de Laryngologie.*

Invertin in Grapes.—

There is present in the juice of all kinds of grape a sucrase, in quantities sufficient to invert the entire amount of saccharose present, without the assistance of any organic acid. The "invertin" is not present in wines attacked by bacterial diseases, and disappears entirely in wines which have been strongly oxydized.—MARTINAUD (*Pharmaceutical Journal and Transactions.*)

Chorea.—

This is a form of rheumatism—*cerebral rheumatism,* in fact—as is well borne out by evidence.—DYCE DUCKWORTH.

Osteomyelitis.—The chief diagnostic point is the acutely sensitive spot near the junction of the epiphyses.—FUNKHAUSER.

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Page X.

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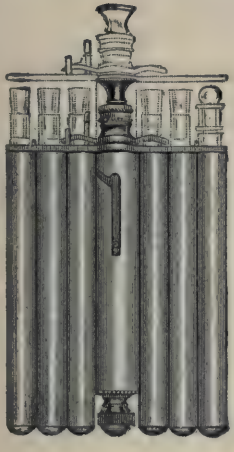

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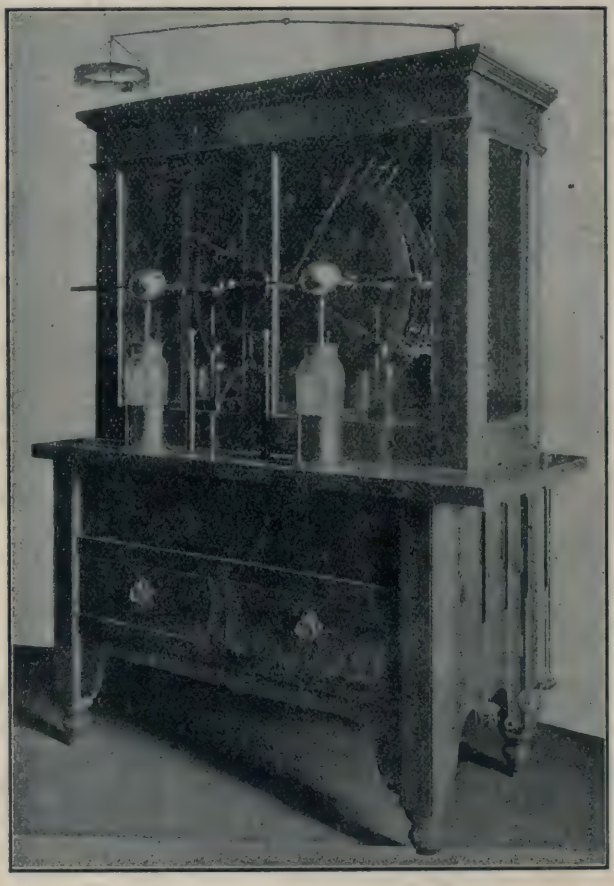

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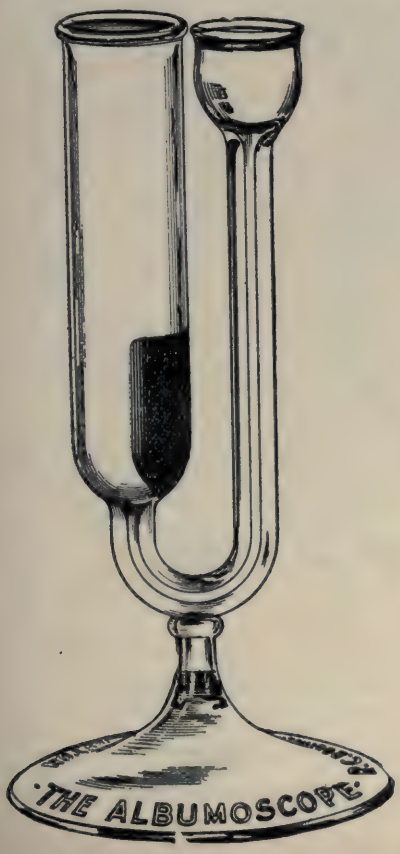

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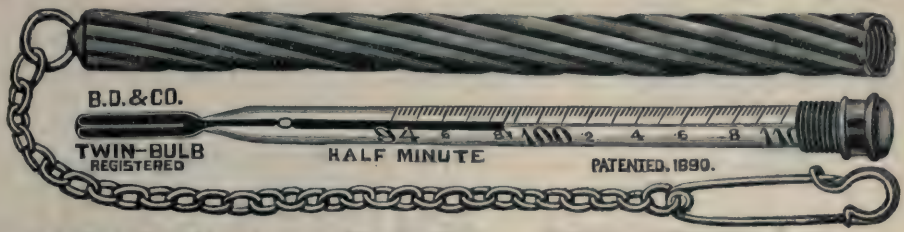

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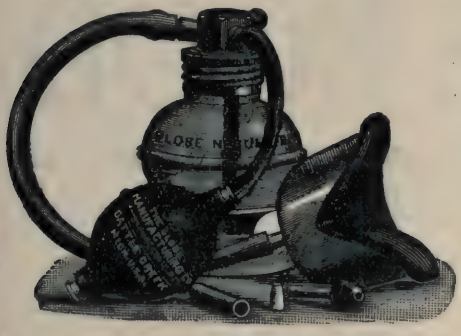

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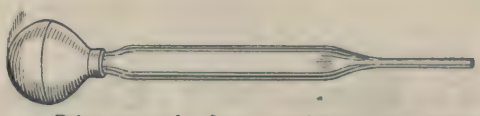

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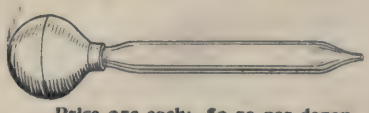

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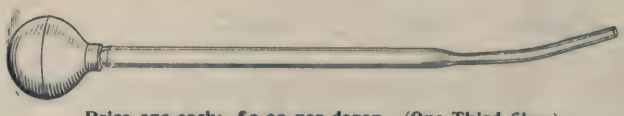

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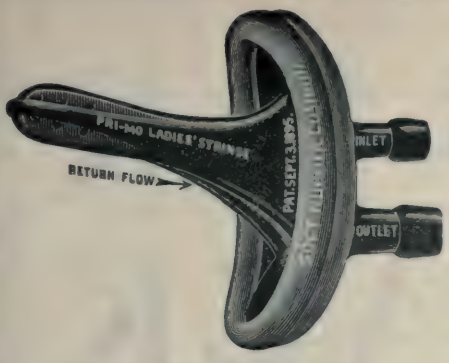

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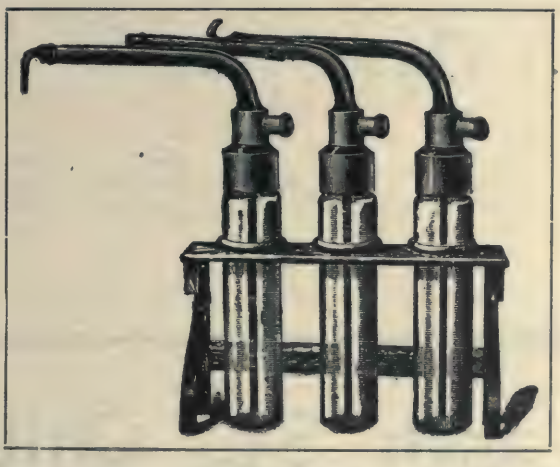

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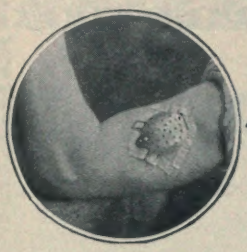

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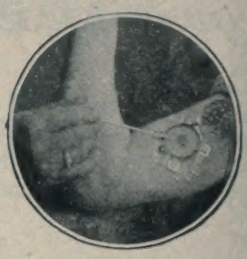

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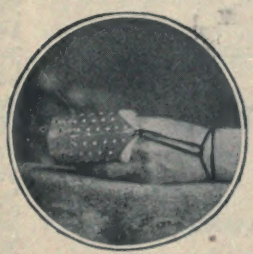

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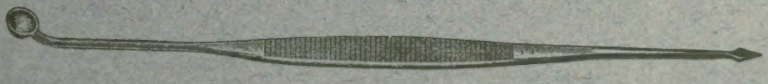

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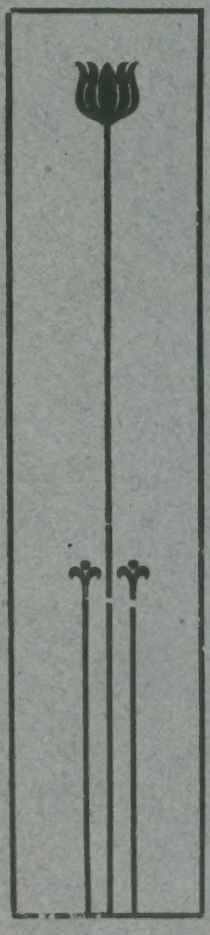

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